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RING THE BELLS OF HEAVEN

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FREYTAG OF THE RED CROSS

KAISER'S SON IN FRANCE

Remarkable Story of a Base
of the American Army

THE SPY OUTSPIED

A most sensational story about the Kaiser's youngest son, Prince Joachim of Prussia, has just been told by Major C. E. Russell, of the United States Army Criminal Intelligence Service.

Major Russell suggests that Prince Joachim acted as a German spy behind the lines with the American army in France, that he was discovered, and, unknown to himself, was used by the American Intelligence Service in such a way that through him secrets of German military movements came into the possession of the Allies.

Rochelle, in Brittany, was one of the secondary bases of the American army. There large quantities of stores were collected, including 75 per cent. of the petrol supply. Eight attempts were made to burn the docks at Rochelle, but each time the fire was discovered and put out. How the fires were caused, and by whom, was a mystery which the American Secret Service felt it must solve at all costs.

The Pale Young Man

In a prison compound at Rochelle were 3000 German prisoners, and they naturally were suspected. The first American countermove was to send three of their Secret Service men into the camp as German prisoners.

Into Rochelle had come a Swiss Red Cross party, and among them was a pale, sickly young man with good manners, named Freytag. His special work was helping the prisoners to keep themselves clean, and for that purpose he was allowed to buy certain chemicals.

The Secret Service men presently noticed that when Freytag spoke to three of the prisoners he always walked with them into the middle of the parade ground, where the conversation could not be heard. They also noticed that these men continually lost their blouses, and that fires always occurred after the blouses were lost.

The Mysterious Acid

Just when these observations seemed to be piecing themselves together into something like evidence, Freytag was taken ill with influenza. An American nurse of German stock was engaged to become friendly with him and keep an eye on his associates, and this she did by telling them she had to look after their welfare while Freytag was away. Presently she gained their confidence sufficiently for one of them to ask her to tell Freytag that the acid was too weak; and Freytag sent by her the reply that they had better wait till he had recovered. Evidently, therefore, acid was being used for some purpose. As soon as Freytag was well enough to go

A New Face Comes to Town



Punch, the new black mangabey, an African monkey that has just arrived at the London Zoo from the Congo. The visitor seems quite contented with his new surroundings, and is very interested in all he sees

out he procured more acid, and, on being watched, he was found experimenting with two acids which, when put together on a piece of cloth, caused it to burst into flames.

The secret of the fires at the docks was revealed. The blouses had been thrown down near inflammable rubbish to start a fire spontaneously when saturated with two chemicals.

Freytag was arrested and threatened with the gallows, but he remained unmoved, and only asked to be shot instead of being hanged. The Germans now began to make great efforts to secure his release; indeed, they offered many prisoners in exchange for him. But this did not suit the American plans. They meant to use his escape to enable one of their Secret Service men to win the confidence of Germans of importance.

Their next move was to send a Secret Service man to Spain, where an influential German committee was sitting, to gain their confidence by scheming the escape of Freytag—otherwise the Kaiser's son Joachim. The arrangement

was made and successfully carried out, and the Secret Service agent had so gained the confidence of the Germans by his supposedly clever helpfulness and braving of danger that he was able to pass into the German lines, and finally return with information of great military importance.

It was when the knowledge of how he had been used for the disadvantage of Germany reached Joachim that he shot himself. His scheme of acting as a spy, under cover of the Swiss Red Cross, had recoiled on his own head. The spy had been out-spied. He had been used as a tool by the enemy in the enterprise he had himself begun, and he tragically acknowledged his own defeat.

That is the story of the princely spy and dock-burner, as told by an expert in the American Secret Service. It forms a remarkable addition to the already remarkable stories about German spies, many of whom carried on their dangerous work in Britain and suffered the extreme penalty within the Tower of London.

GIANT ENGINES OF THE WEST

BIG RAILWAY TRIUMPHS

Locomotives that Weigh Half
a Million Pounds

COMFORT FOR THE DRIVER

Sixteen giant locomotive engines, which are now being built for the Canadian Pacific Railway, will help to bridge the enormous stretch of land which lies between the Eastern and Western shores of the American continent.

In England we regard a twelve-hour railway journey as an event of importance, but it is a trifle compared with the four days and five nights required to cross from the Atlantic to the Pacific shores of the Dominion.

These new engines are triumphs of mechanical skill and invention. Their construction, capacity, and weight place them among the best of their type.

The haulage capacity of each engine is 42,600 pounds, which is obtained with 200-pound boiler pressures, cylinders 25 inches in diameter with a 30-inch stroke, and driving wheels 75 inches across. The three pairs of drivers weigh 180,000 pounds, and the engine and tender together, in full working condition, 493,000 pounds. The tender has a capacity of 8000 gallons of water and 14 tons of coal.

Comfort on the Engine

The cab of the engine, which has been carefully studied for the convenience of the engineer and fireman, provides ample locker accommodation for their stores on these long journeys. It is of the vestibule type, is thoroughly ventilated, and provides the maximum amount of comfort.

Much attention has been given, also, to the general appearance of the engine. The spacing of the pumps, safety valves, and belt on top of the boiler has been arranged to give a uniform appearance, and all the piping has been carefully concealed where possible.

George Stephenson would not recognise this improvement on his old locomotive. Nor would those early pioneers in the Canadian West, who blazed the trail on horseback.

MOVING ABOUT

France is Travelling More

It is very interesting to watch how the French are becoming more and more a travelling people.

A few years ago they were considered the stay-at-home nation of Europe; today the average Parisian is as fond as the Londoner of a week-end in the country or by the sea.

The French railways last year carried 646 million people, more than half as many again as in 1901; and a few weeks ago a quarter of a million people took train from Paris in a day.

Paris is now having to think seriously of enlarging her big stations.

KENYALAND WAY OUT OF ITS GREAT PROBLEM

Something Granted to All the
Groups of People

A WISE SETTLEMENT

By Our Political Correspondent

Whatever the three or four races living in Kenyaland may think of the settlement by the Government of this country, the British people will feel it to be a fair and wise settlement, and will put on it the stamp of their approval.

The native tribes of this attractive land number over two and a half millions. They were there first. To them have come about 10,000 Arabs, chiefly on the coast, who brought slavery with them, but now stay to carry on some forms of trade; nearly 23,000 Indians followed in the white man's service; and nearly 10,000 white people have settled in towns and on farms, chiefly on highlands 4000 to 6000 feet above the sea.

Conflicting Views

The white people think they ought to rule as a superior race who have rescued the land from slavery and savagery and introduced civilisation.

The Indians think they should have equality with the whites, as citizens in the Empire. The Arabs say little, but they are there, and are as many as the whites, though limited in their range.

The natives, mostly of the rather capable Bantu race, are about 60 times as many as all the rest. They say they like government by the British Colonial Office and its official servants, who let them live, to a large extent, in their own way, and who see they are not misused.

Fair Play for All

The Home Government now puts in the forefront of its proposed settlement the overmastering fact that it regards itself as a trustee, whose duty it is to see that fair play is done to the great mass of the people native to the land. The Government can neither delegate to others, nor share with others, its responsibility for those millions of the original inhabitants; and therefore the Government must be carried on in the future as it has been carried on in the past, and the tribes must remain under British protection and government.

That is a decision which is in complete accord with British custom everywhere, and will have unreserved approval from the nation.

But while government chiefly by the minority of whites on the spot is refused, the British settlers receive substantial advantages. They are confirmed in the possession of the agricultural highlands where they can live under suitable conditions of climate.

To the Indians agricultural land will be allotted at a lower altitude, if it is desired by them.

In municipal government the Indians and Arabs will share with the whites, through an electoral system.

On the Legislative Council there will be five elected Indian members, eleven whites, and two Arabs.

The natives will live in quarters of their own, but Indians and Arabs will have full freedom in choosing their place of residence.

A Good All-round Solution

In this way supervision by the Home Government of all dealings with the natives will be secured. The Indians will be given a reasonable share of local influence, and the whites will receive a renewal of their rights in the only regions where they can live in comfort.

Something is granted to each of the groups, and something is denied to each. All may have small disappointments, but all should be substantially satisfied that the Government has done its best.

THE FIRST ENGLISH SURGEON

JOHN ARDERNE AND HIS
WONDERFUL CURES

At Crécy with the Black Prince

A GREAT MAN FORGOTTEN

The Prince of Wales, in talking to the doctors not long ago, spoke of John Arderne, the first English surgeon, who served Edward the Third and was "a



John Arderne. From an old print

very chivalrous gentleman." Who was John Arderne, remembered by the Prince but forgotten by most other folk?

He was the real founder of surgery in England. Many a patient relieved of suffering today owes relief largely to this John Arderne, who was no imitator of other men, but gained his knowledge by personal experience.

He has left us books from which we can learn something of his methods, and it is clear that his skill and knowledge were amazingly in advance of his time. He was an original thinker, and stands out far ahead of all his contemporaries.

He was not even a doctor of medicine, but a mere layman; and though he was so astonishingly successful in curing a painful complaint that was very common in his day, he is extremely modest, and attributes the whole of his success to Providence.

Building Up a Practice

He practised in Newark from 1349 to 1370, and then came up to London, where he very soon built up a large practice and had many distinguished people among his patients.

One of these was Sir Adam Everyngham, who had been given up by all the physicians and who had come home from the French wars, to die. John Arderne heard of his case, sought him out and, as he tells us, "I healed him perfectly within half a year, and afterward whole and sound he led a glad life by thirty year and more, for which cure I gat much honour and praise throughout all England."

Powerful princes became his friends and patrons, and the Black Prince gave him an estate in Ireland. John Arderne was himself present at the battle of Crécy, where the Black Prince distinguished himself and won his spurs.

He gives a long list of the people he cured, and then adds, "All these aforesaid cured I before the making of this book; our Lord Jesus and the Blessed God knoweth that I lie not."

Fees in the Olden Time

While John Arderne was a thoroughly skilled surgeon and attributed his success wholly to Providence, he was not indifferent to wealth, and seems to have charged very heavy fees, as a result of which he made a fortune. In his book on the Art of the Doctor, where he gives rules and hints for the use of doctors and surgeons, he mentions the fees that should be charged for the cure of complaints. "Never in all my life took I less than a hundred shillings for a cure," he says, and we must remember that money was then worth at least twenty times its present value.

John Arderne's instructions as to how operations should be performed are very clear, and were followed for two centuries or more. Even in the seventeenth century famous surgeons carried his book with them as their guide.

His books were written in Latin, and possibly the fact that they were not translated for centuries accounts for his being unknown except to scholars. But certainly John Arderne should occupy the same place among surgeons that Harvey does among doctors, and we congratulate the Prince on bringing his name to public notice.

RING THE BELLS OF HEAVEN

GREAT EXAMPLE OF A
LITTLE TOWN

Loughborough's Noble Memory
of Its Noble Dead

FINEST BELLS IN ENGLAND

The Leicestershire town of Loughborough, lying at the foot of the Charnwood Hills, one of the most ancient granite masses of Britain, has thought of a peace memorial which ranks in impressiveness with the Cenotaph and the Unknown Warrior's grave.

The town has long been famous for its manufacture of bells, and by the happiest of inspirations Loughborough felt that through music its love and pride and sorrow and hope could best be passed along to unborn generations.

Remembered in Music

So, with one common will, its people resolved that its remembrance should most fitly endure through the music of its home-made bells.

Music appeals to the sentiment of all mankind. It knows no bar of race, language, or colour. There is no speech in which its voice, like that of the heavens, is not heard; its sound goes forth to all the world. Loughborough resolved that its sacred memories should be chimed in universal tones.

And so, into a campanile, rising from its people's park, 150 feet high, they have placed a perfect carillon of 47 bells, the finest in England, sounding all the tones of four octaves, and expressing all the emotions that music can capture and express.

It became a coveted honour to all the Loughborough citizens, and the little citizens to be, to have a share in one of these bells which, from the tiny trebles seven inches high down to the solemn bases five feet high and weighing four tons, would pour forth in the lovely strains of peace the town's proud remembrance of its gallant dead.

Land of Hope and Glory

The schools bought their bells with the children's pennies; the workmen had their bells and the tradespeople theirs; the rich were glad to share in the honour that belonged to all. Each bell tells of its origin. And so the 47 bells, at a cost of £7000, were mounted in the £10,000 tower, round whose base are the inscribed names of 478 men who went forth to return no more.

The bells are sounded by levers, worked from a keyboard and pedals, like an organ; and to find a player it was advisable to go to Belgium, the home of the carillon form of bell music. Happily it was possible to bring to Loughborough, for the dedicatory service, the most famous carillonneur in Europe, Chevalier Josef Denyn, of Malines Cathedral, and M. Denyn gave a week's concerts on the new bells.

Peace and Quietude

Before that time the news of what Loughborough was about to do had spread throughout the Midlands, and 50,000 people flocked from near and far to hear, as the opening chime, Sir Edward Elgar's Land of Hope and Glory, and a special composition of bell music by the same great musician, with Chopin's noble Funeral March. Later, the concerts by M. Denyn gave ample proof of the beauty, range, and power of these magnificent bells, especially when the listener is sufficiently far away for all the bells to blend in harmony.

Loughborough players, taught by M. Denyn, will in future keep the carillon in daily use; the bells are to ring "every day for ever."

Complete as is this memorial in its conception and achievement, filling at evening the valley of the Soar with its "concord of sweet sounds," and the hearts of mourners with comfort, its other meaning is equally powerful. The bell is the symbol of peace and quietude. It tones with the finer

THE COCONUT COAST PLANTING 350 MILES OF TREES

Britain's Splendid Work in
Darkest Africa

TENNIS AND CRICKET FOR THE NEGROES

When we who live in England seek to conjure up a notion of great woods, we think of our lovely New Forest, William the Conqueror's tragic hunting ground. It is 16 miles by 14 miles in extent, one-fourth by woodland and the rest open heath or bog.

Now think of a tract twenty times as long as the New Forest, and add nearly two more New Forests to that, and imagine such a tract an unvarying mile in depth, and consisting of an unbroken succession of trees, and we arrive at an idea of what the people of the Gold Coast are making.

They are planting a belt of coconut trees one mile deep from end to end of their coastline, which is about 350 miles. Here we have 80,000 square miles of African territory where Europeans are few, and natives number one and a half millions. Under British rule, with Government and missionaries working hand in hand, they are making a marvellously prosperous State.

A Name with a History

There is fascination in the name of Gold Coast. It was given by old voyagers who went there to barter for gold dust brought down to the coast from an interior which was a dark and terrible mystery to them. They called this area in the Gulf of Guinea after the product which alone recompensed them for the trials and perils of their voyages.

There is another story in the territory adjoining, a shameful story which will some day have to be written off the maps. The name there is Slave Coast. The area more to the west is called the Ivory Coast. There men went for ivory brought down by native hunters, who slew elephants with their spears and in their pitfalls as freely as huntersmen slay foxes in England today. But in those cynical days the names of Slave Coast and Ivory Coast were interchangeable. For men called the tusks of elephants ivory; and they called the poor men and women and children whom they caught and sold into bondage Black Ivory.

Supplying the World with Cocoa

Well, that is all over now, and the people of the Gold Coast are as free as ourselves. They are doing wonders, we are told by the Duke of Devonshire. Gold dust still comes out of their rich land, but that is small in value compared with the product of husbandry.

This little tract of Africa from which slaves used to come now supplies half the world with cocoa. The coconuts which are to fringe their shore are for oil and cattle-fodder. The worth of the harvests of this sort utterly dwarfs the value of the gold and of the old evil traffic in flesh and blood.

Many a Negro now free in America was torn as a slave from the Gold and Slave Coasts; his relatives are in the Dark Continent still. The dark people of the Gold Coast do not wear enough clothes to make them welcome in our drawing rooms here, but they are getting on. They are taking our games as well as our business methods. Proficient in cricket and football, the natives are now constructing tennis courts.

Continued from the previous column

thoughts and aspirations of men when hasty brawls of life are over, and points us to a better time than ours. Such a memorial is peculiarly fitting in a time when the jangling discord of selfish notions has not yet subsided, though the heart of all that is good in the world asks for the harmony of a wider brotherhood. Let us pray for the day when all the world, like Loughborough Town, may hear the bells of heaven.

August 11, 1923

The Children's Newspaper

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LOOK-OUTS ROUND THE POLE

WEATHER WARNINGS FROM THE ARCTIC

Interesting Scheme that May Be of Untold Benefit

LONELY LIFE FOR MEN OF SCIENCE

The study of the weather is being carried out in many lands, especially in Britain and America, with a thoroughness that has never before been attempted.

Efforts are being made to foretell the weather, not in any quack or unscientific way, but by taking careful observation in the region whence the weather is likely to come, and sending advance notice of this by means that are far faster than any weather can travel.

This scheme is enormously helped by wireless; and a development has started that may have far-reaching effects in Britain and America, and, save for the existence of wireless telegraphy, would be quite impossible.

The Chain of Stations

The idea is to establish a chain of weather stations round the North Polar regions, some of them on islands, some on the mainland, and others on ships afloat in the Arctic seas, to observe the weather conditions, the temperature, the direction of the wind, the storm prospects, and so on, and to wireless these to the outer world.

Many of the worst storms experienced in North America and Northern Europe are born, unobserved, on what is called by meteorologists the Arctic frontier, thousands of miles from the civilised and populous parts of the world. They sweep over cities and farmsteads without any preliminary warning, so that no preparations can be made to meet them, and it was to do something in the way of remedying this defect that the one solitary Arctic weather station was established, some time ago, on the remote island of Jan-Mayen, off the east coast of Greenland.

Birthland of the Blizzard

It has been useful in sending warnings, but, of course, really accurate forecasts of coming storms and blizzards are impossible without a complete chain of weather stations all round the Pole.

A Norwegian meteorologist, Professor Ekerold, has been consulting the authorities at Washington with a view of getting America to cooperate in setting up such a series of weather stations all round the Arctic, in the birthland of the blizzards.

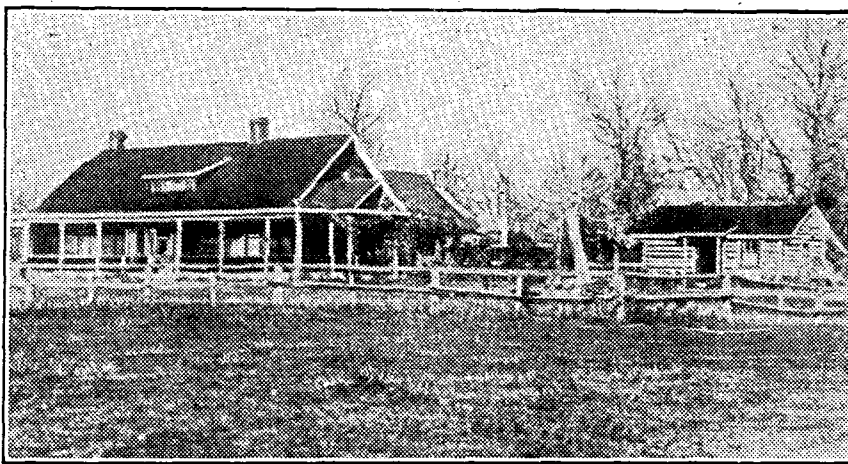
In the old days, even a few years ago, such a series of observation posts would have been useless, for they would have had no means of communicating their observations rapidly to Europe and America. But now, with wireless, that obstacle has been overcome and communication would be easy.

Storms Sweep Over Sea and Land

The Arctic frontier follows the general line of the Arctic circle round the world, and it is here that the cold air from over the ice-caps meets the warmer and moister air that comes from the oceans to the south, setting up great storms that sweep for thousands of miles over sea and land.

If the scheme comes to fruition, as it probably will, the services of the weather men in the Arctic will be of untold benefit to their fellows in civilisation; but their life in the North will be a hard and lonely one. Nevertheless, there will be plenty of men with scientific training and aspirations who will gladly undertake this task in the interests of science and of their fellow men.

THE RANCHER OF THE ROCKIES



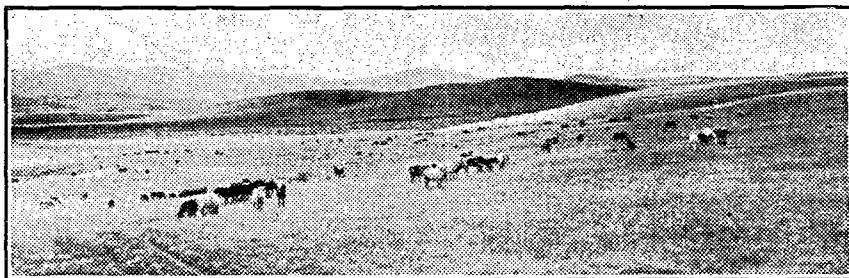
The Prince's ranch, where he is going to live the simple life



The Prince out for a canter on an adjoining ranch



The Prince inspects some of the cattle on his ranch



The kind of scenery the Prince will see from his windows

The Prince of Wales is going to visit his ranch in the foothills of the Rocky Mountains, and for a month or two will live the simple life there. These pictures were taken when he was there during his Canadian tour in 1919

THE PROFITEER OF THE SUGAR FIELDS

ARGENTINE ANT AND ITS WAYS

How It Organises the Mealy-Bugs

INSECT COOPERATORS

By a Scientific Correspondent

It is hard to believe that an insect can make our sugar cost us more, but something which has just been found out about the Argentine ant makes it clear that this insect is no friend of ours.

The sugar-cane crop in the West Indies and in America is attacked by an unpleasant insect with the unpleasant name of the mealy-bug. Steps have been taken to deal with the mealy-bug, but it has lately found in the Argentine ant a protector which looks after it in a most scientific manner, on what may be called a profit-sharing basis.

The mealy-bug, after feeding on the sugar-cane, secretes a kind of honey-dew, as a bee secretes honey. The Argentine ant, which is a new-comer to the sugar-cane fields, quickly discovered this, and, being a bold and powerful highwayman, quickly robbed the mealy-bug of its earnings.

But the ant, being also an insect of great intelligence, perceived that there was a better way of getting the golden egg than that of damaging the goose that laid it. Why not preserve the mealy-bug, set it to work, keep it in comparative comfort and safety, and take merely the larger share of the profits?

The Ant as a Tax-Gatherer

So the Argentine ants set to work to build little mud refuges into which to herd the mealy-bugs, and in which they are safe from too much sun, or rains, or storms, or other enemies. Then they could be taxed and made to pay rent in the form of honey-dew. Also, in the collection of the honey-dew the mealy-bugs could be kept clean.

It all sounds almost incredible, but it is vouched for by the expert entomologists of the Louisiana University Experimental station, and the effect of the Argentine ant's exploitation of the mealy-bug has been greatly to increase the mealy-bug's numbers. So now the Argentine profiteers have to be dealt with.

SAVING THE CLIFFS

Plant Fighter of the Elements PROTECTION FROM WIND AND RAIN

Almost by accident a means of preventing cliff erosion has been brought to light in England.

Where the cliff is formed of such soft materials as clay, sand, or gravel erosion is often more due to the action of wind and rain than to the attacks of the sea. A few years ago, at certain places on the South Coast, sections of the cliff were planted with a South African plant called the mesembryanthemum, largely with the idea of covering bare patches with green.

This species has succulent leaves and a creeping habit, and is a native of desert tracts in the region of the Cape. The specimens that were planted thrived amazingly on the cliffs. Small pieces a few inches long will in one summer spread over an area of several square yards, and the growth is now so thickly matted that the surface of the cliff is completely protected.

The plant is able to withstand long spells of dryness, and never appears to suffer from want of moisture, even when growing in plain sand. Considerable areas of the plants hang down like a living carpet on many of the southern cliffs, and it is curious that, although the plant is not naturally a maritime species, it seems able to withstand salt spray and will often creep close to high-water mark.

OUR SILENT SHIPYARDS

DEVASTATED TERRITORY IN ENGLAND

Why there is So Little Demand for Ships

A FACT THAT WAS FORGOTTEN

The war has left devastated territories in England, too, though they are not plain to see like those of France and Belgium, where the towns are in ruins, and so they are apt to be overlooked.

It is in our shipyards and our factories and in the homes of the workers that Britain's devastated territories are found.

Of all our industries shipbuilding, with its kindred trade, ship-repairing, has suffered most severely. Sail up any of the great rivers or harbours, and on every hand you will see ships tied up at the buoys, ships for which there is at the moment no use.

Silence that Affects Our Nerves

Passing up that great shipbuilding and repairing river the Tyne, on each shore are yards that greet us with a silence affecting our nerves far more than the shattering clamour of the riveter's hammer. That silence means thousands of men out of work, thousands of families suffering poverty.

When the war ended our shipbuilders, in common with all the rest of the world, made a great mistake. They believed that all was well, that the statesmen of the world meant what they said, and that peace was coming. Therefore, said the shipbuilders, "Now that war is over all the people will be crying out for goods, and to carry those goods ships will be needed." So they set to work with such a will that by 1920 there were as many ships afloat as there had been in pre-war days, despite the enormous number that had been sunk and lost.

No Money for Goods

But the shipbuilders and the rest of the world had forgotten one fact—war must be paid for. When they said the peoples would be crying out for goods they were right, but the peoples had spent their money in smoke, blown it away, and had none left to spend on the goods they needed so badly. Then, too, instead of settling down to make good war's destruction, the nations of Europe went on squabbling over what they called the Peace.

Thus the exchange of goods between country and country is but a fraction of what it was before the war; yet there are as many ships to carry them in. Small wonder that ships are idle!

There are ships being built here and there, of course, but nothing approaching the normal number, and these are mostly ships needed for some special purpose, built to suit the requirements of some particular route.

That the slump is not due to the loss of our reputation as great shipbuilders is shown by the fact that a number of ships for service on the Great Lakes of America are now being constructed in various yards in this country.

Difficult Times for Ship Repairers

The ship repairers, also, are passing through difficult times. With the number of ships plying the seas so reduced, so, naturally, is the amount of repair work needed. And though there are fewer ship-repairing jobs to be done there are more ship repairers to compete.

Before the war we were the ship repairers for Europe—almost for the world. But during the war our yards were working might and main to repair the ravages the U-boats made in our own merchant service; and the countries not in the war—Spain, Holland, Norway, Sweden, and Denmark—finding themselves in difficulties for repairs, built dry-docks and repairing yards of their own, which now compete with ours.

What is the remedy for it all? The answer is Peace.

RICH MAN AND HIS POOR MOTHER

MR. FORD IN HIS OLD HOME

Everything as His Mother Saw it Long Ago

A PLAIN WOMAN'S WISDOM

Henry Ford, the many-times-a-millionaire maker of motor-cars, is one of the most remarkable men in America.



Henry Ford's mother

He is only known to have failed in one thing. He set out to make peace in Europe when war was raging, and nobody took any notice of him. In everything else he has succeeded.

It is now said that he means to be President of the United States, and it is not certain that he will fail in that, if he really sets his mind on it.

His last deed shows him to be as sentimental in family matters as he is practical in business. He was born on a little farm in the State of Michigan, and the most powerful influence he has ever felt was that of his mother in that humble home. To recall it he has remade the home exactly as it was.

The house as it now stands goes back to 1876. It is now exactly as then. There is the same stove, the same clock, the same carpet (or one just like it), the same little ornaments, the same candlesticks, and a clay pipe like his grandfather's. Also there is the same sampler, with his mother's motto: "There's no place like home."

Service the Highest Duty

From the kitchen to the bedrooms everything is reproduced, and the routine of household duties is kept up on his mother's plan. It is all arranged to be a tribute of gratitude to the mother of whom he says: "She taught me that service is the highest duty. I believed her then; and I believe her now. I have tried to live my life as she would have wished, and to do just what she hoped I would do."

Showing the cottage to a friend the other day, Mr. Ford talked of his mother.

"It's just about the same as it was in the old days," he said. "The sofa stood over against the wall and the organ in the corner. We used to have good times around that old organ, too. This house meant something to us then. Mother ruled it, but she made it a good place to be in."

"A lot of people don't make use of their homes as they should. When they want a good time they go to some other place to get it. That's all a mistake. The best times I have are at home. We were all over here last Sunday evening. We sang a few hymns, and talked and played with the children, and had a real good time together. What the modern family needs to learn is the art of being happy with each other."

"That was mother's idea. I heard her say in this room that if we couldn't be happy in this house we'd never be happy anywhere else."

Taking Care of the Horses

And here is another wise bit of talk from the man who has done more than any other man to abolish the horse.

"As a boy I had to take care of the horses. I didn't like the job; I wouldn't like it now. Almost any other job would have pleased me better. But mother held me to that job because she knew it was better for me. She taught me that disagreeable jobs call for courage and patience and self-discipline, and that saying 'I don't want to' gets a fellow nowhere. I didn't want to take care of horses, but I did take care of them. It was my work, and I was made to do it, and it was for the best."

WORLD'S FOOD

Possible Way of Increasing It

A NEW X-RAY DISCOVERY

By a Scientific Expert

A discovery has been made in Germany in connection with X-rays which is likely to prove of immense value in the preparation of foodstuffs.

In many processes of making fats from vegetable oils, the production of the fat is greatly increased by the aid of a mysterious substance known as a catalyst. This catalyst, which is often powdered nickel, suffers no permanent change during the chemical action, yet the process will not go on without its presence.

Day by day these catalytic processes are becoming of greater importance. They are used on an enormous scale, especially in certain food industries.

The discovery that has now been made is that the catalyst can be rendered much more energetic by exposing it first to the

The Delighted Princess

And the Mother of the C.N.

The interest of the Queen of Rumania in the Children's Encyclopedia was referred to in the C.N. a few weeks ago, and from the royal castle at Sinaia, in Rumania, the Editor has now received the following letter:

H.M. the Queen of Yugo-Slavia has asked me to order The Children's Encyclopedia for her, including all the back numbers.

Her Majesty is here on a visit just now, and is so delighted with what Princess Ileana has shown her. Please have all the copies sent to her addressed to the Palais Royal, Belgrade.

So, into palace and cottage alike, the greatest children's book in the world is making its way. The new fortnightly part of it is now on the bookstalls, side by side with the C.N., which grew out of it.

X-rays. In a catalytic process for the making of sulphuric acid, for example, the yield was increased by more than half in a given time, which means that the output of the sulphuric acid plant could be greatly increased with the help of the X-rays.

Needless to say, these experiments are being carefully followed up, and may lead to results which will greatly benefit our manufacturers, and may considerably alter the outlook of some of our future food supplies.

LAUGHING LAST

Cotton Enriching a Continent

Australia promises to be the greatest cotton-producing country in the world.

Successful experiments have recently been made there, and the British Cotton Growers' Association assesses the value of Australian cotton at from 25 to 50 per cent. higher than American, which is the world's standard.

Mr. Crawford Vaughan, who was formerly Premier of South Australia, has been most enthusiastic for years in declaring that Australia has a great cotton future. When he originally stated that cotton could become one of the chief products of the continent, in the same way as wheat, wool or minerals, he was laughed at, but they laugh best who laugh last. Cotton, we may be sure, will enrich the great southern continent.

JAPAN MAKES A DISCOVERY

Her Oil Wells Drying Up SCIENCE FINDS A WAY OUT

One of the first countries to use up its natural supplies of oil fuel is Japan.

Her wells are beginning to run dry, and, as with other countries, her wants are daily growing. Rather than go to the high cost of drilling, the Japanese have been buying crude oil from abroad and refining it.

Great interest has been aroused in the oil world by the news of a new process invented by a young scientist attached to the Tokio Imperial Scientific Laboratory, to whom the Japanese Government has issued a patent.

The process is quite Japanese in its curious simplicity. The new motor fuel is to be obtained from fish and vegetables! Edible and other oils are already obtained in a large way from these two sources in Japan. When they are put through a special oven containing hot coke and the heat reaches 400 degrees, petroleum is produced, and can be refined or distilled like the crude petroleum obtained from natural oil wells.

So successful has this proved that it is stated that the whole of the Japanese air forces can be supplied with the new oil.

THE THREEPENNY-BIT MYSTERY

Story of an Unwanted Coin

A reader of the C.N., finding no fewer than 30 threepenny-pieces in a small bag of silver which he obtained from his bank the other day, took them back and asked for an explanation. The cashier told him a curious story.

All the branches of the great banks in London are swamped with these irritating little coins. There is not a bank in the suburbs, he says, which has not from £100 to £200 worth of them.

The head offices of the banks are reluctant to take them from their branches. Local managers, when asked by headquarters to send up silver coins, say: "I can let you have what you want if you will take £50 worth of threepenny-pieces off our hands."

Now, the Mint continues to produce these unwanted little coins, though every now and then a big bank sends them back to the Mint by the cartload.

The banks get the major part of their threepenny-bits from the churches and chapels. It is for them, in the main, that these mean silver coins are reserved. The churches and the drapers handle the majority of them. A threepenny-piece is a convenient coin for the draper's small change; but, as the sum of this small silver is daily growing at the banks, the evidence suggests that fewer and fewer must be demanded even by the drapers.

So there the matter rests. The solution seems to lie with the Mint.

A CROOKED HOUSE

Window from which the Sky Cannot be Seen

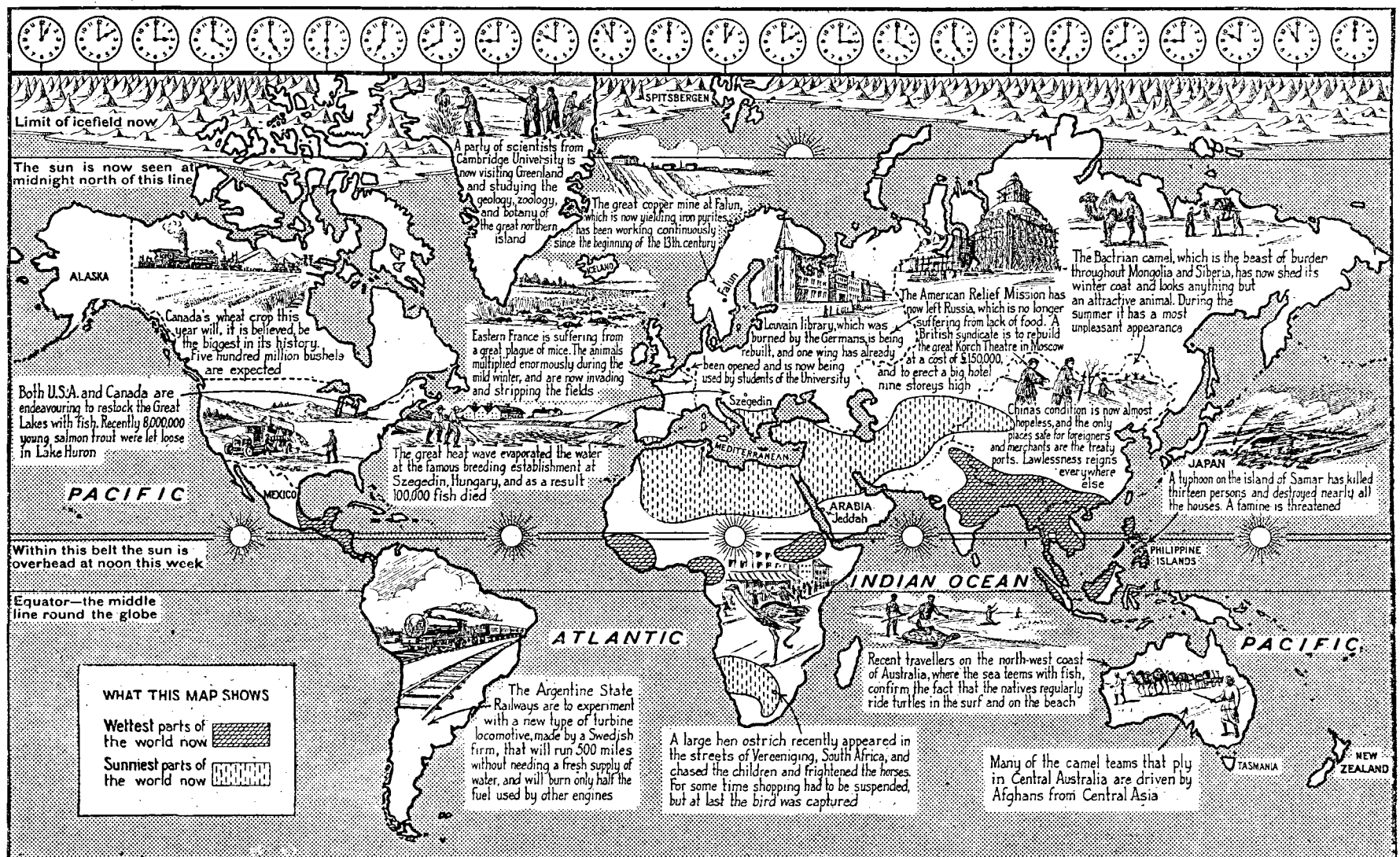
The recent story in the C.N. about the crooked house in the Black Country reminds a reader of another curious house—Wychbold Hall, in Worcestershire, the home of Judge Amphlett.

The building is topsy-turvy; some of the walls have an angle of quite 80 degrees. The floors are uneven, and one of the windows facing a lawn leans so much that the view of the sky is cut right out. The pictures hang away from the walls, and the furniture looks as if it is toppling.

It is all due to a subterranean river flowing under the judge's park. A remarkable thing about this river is that it is of salt water, and for many years it has been pumped to supply the brine baths at Droitwich, not far away.

The pumping caused the ground to sink, and this gave the house its grotesque appearance.

PICTURE-NEWS AND TIME MAP SHOWING WEATHER ALL OVER THE WORLD



FIRST MAN IN POLAND A Printer President THE INFLUENCE OF A GOOD CHARACTER

The new European republics are choosing for the highest office in their constitutions quite homely men of democratic origin.

Friedrich Ebert, the first President of Germany, was a working saddler, and the President of the Polish Republic, Stanislaw Wojciechowski (pronounced Vo-je-hof-ski), was a printer in London.

Up to December 20, 1922, when he was elected president in succession to General Pilsudski, he was living in the simplest way possible in a little flat of an apartment house in Warsaw. Now he lives in the palace allotted to the President, surrounded by luxury which he does not covet. He is, however, a dignified figure, wherever he may be living, and is popular and trusted.

Presidents do not have much power. That is wielded chiefly by the Prime Ministers; but by reason of his sterling qualities, in which simple sincerity is conspicuous, the new Polish President has wide influence, the influence of personality rather than of position, and when it is really necessary he can speak with firmness and conquer distrust.

RAIN IN AUSTRALIA A Popular Error

It is often erroneously suggested that Australia as a whole is subject to drought. The Agent-General for Western Australia points out that this is a libel on Australia.

It is true that a part of the interior of Australia is subject to drought, and the same applies to the interior of Western Australia; but there is a huge territory in the north, the Kimberleys, and in the south-west of Western Australia which has heavy and certain rainfall rarely known to fail, and this year the rain has been exceptional.

A HAPPY FAMILY 400 Singing Orphans

From a Correspondent

Stone-layings are generally dull, but there was one at Birmingham not long ago which must have inspired all present.

For a bright spectacle it was. The many visitors saw and heard 400 happy children who were once homeless outcasts singing in the sunshine a welcome to their home—an orphanage.

You might think that children who had never known the love of a mother and the joy of a home of their own could not sing sweetly, but sweetly did these children sing "Sweet flowers and fruits Thy love declare."

Sweet flowers and fruits! Was it not true? The doctor who laid the stone had been saying that in all the 36 years he had been there he had found the little children of the orphanage kind to each other and well behaved.

And so the harvest hymn was true. There is a harvest in human nature always going on. Its loveliest flowers are devotion and self-forgetting kindness, its cherished fruits are sweetness and charity.

A HORSE'S CALL FOR HELP

A Tale from the Hills of Wales

This instance of a horse's appeal for human help is sent from South Wales.

A miner, returning across the hills from work, was seized on the shoulder by a horse which had trotted after him. Having attracted his attention, the horse went back a short distance and waited. When the miner went on the horse again followed him. He now realised that something was amiss, and followed the horse, which led him to a pond, and there he found a foal fast in the slime at the bottom of the pond.

He removed some of his clothes and rescued the foal; and his mother then showed plain signs of gratitude, even licking his face in her attempts to express her thanks.

GREENLAND'S ICY MOUNTAINS Whose Are They? NORWAY AND DENMARK THINKING IT OVER

A mild dispute is now going on concerning the ownership of Greenland's icy mountains.

The ownership of the Arctic islands nearest to Northern Europe is rather mixed. Iceland is independent, but acknowledges the King of Denmark. Greenland belongs to Denmark. Spitsbergen belongs to Norway.

Now the Norwegians claim rights in the north-east part of Greenland, opposite Spitsbergen, while the Danes say "Hands off," though the Danes admit that the Norwegians have fishing rights there.

One point in the dispute is that trade with Greenland is claimed as a monopoly by the Danish Government, and that, the Norwegians think, is not fair.

These intelligent Northern nations are much too civilised to quarrel, though they may indulge in a little brisk bargaining with one another.

CANADA'S MOVING SHOW A Visit to France

The Canadian Government has hit on a novel way of showing the world the Dominion's resources and the many kinds of goods it has to sell.

Two years ago an exhibition housed in a train was sent across Canada from the Atlantic to the Pacific, so that people in one part of the country were able to see for themselves what the people of other parts were doing and making. Now Canada is sending a travelling exhibition through France.

This time, instead of going by rail, the exhibition is visiting the French towns by road, with the exhibits housed in big vans drawn by motor-tractors. A kinema equipment carried on board will show the French people what Canada is like and what it can offer.

HE GAVE HIMSELF FOR HIS PEOPLE Greater Love Hath No Man than This A PROUD CHIEF'S PROUD MEMORY

A man who gave himself up to the doctors that they might experiment on him to discover a cure for sleeping sickness is to have a memorial tablet in the London Hospital.

He was an African Negro chief named Mandombi, and his was the first case of sleeping sickness seen in England.

Every four hours for two months his blood was examined till the germ which causes the disease was discovered.

Mandombi was a Nigerian Christian, and when the disease seized on him it was by his own request that he was brought to England for medical experiment, in the hope of eventually being the means of saving the lives of the men of his own country, where the disease was a terrible scourge.

His hope was fulfilled. Myriads have been blessed by his surrender of himself to the doctor's hands for research. It was directly due to his sacrifice that the cause of the disease was found, and the tablet has been placed on the wall of the hospital above the bed in which this brave man lay.

No man has ever deserved a tablet of honour more than this Nigerian chief.

Pronunciations in This Paper

Aix-la-Chapelle	Ayks-lah-shah-pel
Ephesus	Ef-e-suss
Guatemala	Gwah-tay-mah-lah
Jeddah	Jed-dah
Joachim	Yo-ah-keem
Massachusetts	Mas-sah-chu-sets
Mausoleum	Maw-so-le-um
Pheidias	Fy-de-as

CHILDREN'S NEWSPAPER

AUGUST 11 1923

Letting Them Down

It was in a country district, where people have a great pride in being good neighbours, that a friend of the C.N. the other day found everybody very busy, for crowds were thronging round about, and bells were ringing, and every conceivable conveyance was either hired or lent. Yes, *lent*.

And it went farther than that. "I'm afraid I shall not have enough petrol; could you lend me a couple of tins?" asked one neighbour of another. "Certainly," came the reply; "take two." Then, turning to the interested visitor, he added, "In this part of the country we never let any one down."

What a simple, big thing was that! There, down in the country, it seemed the most natural thing in the world to do whatever was helpful to a neighbour and would save him from any disappointment. And to the visitor, whose business it often is to think of what may be good for the world everywhere, it seemed as if a really great thing had been said, and said as a matter of course.

An ordinary thing said and done by the ordinary folk of the world, yet think what a different world it would be if men, as neighbours, as classes, as nations, never let each other down!

Think what it would be if the natural desire to be neighbourly, in a way helpful to all, were everywhere to prevail, as it seemed to prevail in that homely countryside!

If envy, jealousy, suspicion, and dislike were swept away; if putting people into an inferior position were too hateful a thing to be tolerated; if giving a helping hand all round were a pleasure to us all—why, four-fifths of the evil things in life would be charmed away!

It is just because men in groups, and parties, and nations, do not think of their fellows as those who must not be "let down," but rather think of them as men who must be "put down," that we find unrest, unhappiness, and anxiety everywhere.

If more people felt that others, men like ourselves, must not be "let down" there would not be movements bringing want and anxiety to myriads of innocent people because some had their minds fixed on gains for themselves. There would not be wars.

The neighbourly spirit is the winning spirit in the end, the sound national spirit, the truly Christian spirit, the one hope of the world, for it is big-hearted enough to embrace all the world, and those who reject it, under any pretence, are the enemies of mankind, whether they call themselves politicians, or patriots, or proletariats, or anything else known to the alphabet.



THE EDITOR'S TABLE

Fleetway House, Farringdon Street, London

above the hidden waters of the ancient River Fleet, the cradle of the Journalism of the world



The Everlasting Child

Two ladies, who had expressed admiration of their hostess's small daughter were heard to say as they left the house: "Molly is a nice little thing, but rather too pert." "Yes. She talks too much. Children were not so forward when we were young—they were seen but not heard."

People who think like that have usually forgotten their childhood. Few of us were model girls or boys, and we should not compare the manners of the young with the manners of those who are old enough to know better. Possibly when Molly is a grown-up she will be surprised at the naughtiness of other children.

That is the way of the world. It is wiser and kinder to be tolerant, and remember that we may seem to others as imperfect as others seem to us.



His Next Idea

The Caller

We gladly send this story on its way through the minds of millions of people.

DR. PHILLIPS BROOKS, the famous American bishop, was greatly beloved by children. To one family of little people he was especially attached.

One day when he called to see them a strange maid opening the door did not know the doctor, and merely took a message to the nursery to say that "a gentleman had come to see the children."

They were at once told to leave their games and to "come and be tidied up to go downstairs."

Protests were of no avail. The faces of the little rebels were washed, their hair was brushed, stiffly-starched frocks were thrust on to stiffly-resisting bodies, and they finally descended, in great indignation, to see this unknown gentleman who was responsible for all the trouble.

The eldest of the party opened the drawing-room door, and then there came a glorious change. As they caught sight of the well-known features of their beloved bishop, they cried, in tones of mingled scorn and ecstasy, "Gentleman indeed! Why, it's Dr. Brooks!" and rushed into his arms.

The Five Sisters

WE were talking of the changing fortunes of the world, of the tragic lot of those whose burden in these days is almost too heavy to be borne.

How many people who once lived in happy homes, who drove about in carriages before the days of motor-cars, are wondering what will happen when their scanty savings are all gone, perhaps in the year after next!

"I know one case," said somebody. "I went into a house the other night and found five sisters sitting by the fire, all over seventy."

God gave us memories that we might have roses in December, a wise man said. We hope the roses will come in December for these five old ladies, sitting by the fire, remembering.

Tip-Cat

EAT with an empty and happy mind, is a doctor's advice. What is wrong with the old way of doing it with the teeth?

HAYMAKING, according to a countryman, is a trying job in the sun; and if there isn't any it is no use trying.

It is a misfortune, according to a tennis player, if the spring goes out of your racket. It shows it is not properly seasoned.

THREE greens in a woman's dress would, writes an expert, set one's teeth on edge. Not a vegetarian's.

THE gentleman who notes that people now think more of right living should remember that we have now hardly anything left.

THERE have been riots in Iceland. Even there they have been getting over-heated.

INITIALS are becoming fashionable. So many people are compelled to live on their capital.

The Looker-On

By Our Country Girl

THE bride was learning to bicycle, and every day she dragged her metal steed to a certain gentle hill bordered by soft turf. Up and down she struggled, tottering into the ditch less often as the days went on.

At the foot of the hill was a cottage, and one morning the bridegroom found a woman standing in the doorway gazing at his wife's zig-zag descent. She was odd-looking, to say the least of it, and, turning to the bridegroom, she said:

"Every day she comes; every day I watch her. I love it. I love anything to do with engineering. You see, I was brought up to the telephone myself."

Servant of All

By Harold Begbie

THE Soldier flames with splendour,

The Sailor's eye is bold,
The pomp of Judge and Prelate
Is wondrous to behold,
The Alderman and Actor
Are vain as any peer;
But modest as a daisy
Is Mr. Engineer.

Who ever heard him boasting,
Who ever heard him sneer;
This lord of solid Progress,
The silent Engineer?

LIFE still had been a jungle
And men like soulless beasts,
Mean slaves of hateful tyrants,
Sad dupes of kings and priests,
If pluck had found no channel,
And faith had not burned clear,
And truth had no disciple
In Mr. Engineer.

The merchant gets the profit,
The statesman gets the cheer,
But he who does man's business
Is Mr. Engineer.

THE world swings on to power
With wheel and crank and rod;
The Earth obeys in silence
This suffragan of God;
He masters air and ocean,
He brings millennium near;
The soul of evolution
Is Mr. Engineer.

With neither plume nor scarlet,
With neither sword nor spear,
From triumph unto triumph
Goes Mr. Engineer.

He Did Not Smile

AN Englishman—who has lived on five continents relates the following incident in a book called *Peoples and Places*:

When in Guayaquil I was waiting to be seen by a doctor, and, noticing that all the chairs in his room were chained to the wall, I smiled.

Some months later I returned to London, and, having occasion to use the nail scissors at my club—quite a good one it has always been reckoned to be—I found, to my amazement, that they, too, were made fast with a chain. I did not smile.

It is a tragic thought that petty dishonesty exists among any class in the community; but we must remember that two or three black sheep in any body of people would make such humiliating precautions necessary and so blacken the character of all the rest.

We remember a famous hall-porter at a certain club in London who found a member's purse and returned it to him with the remark: "Lucky for you, sir, that it wasn't picked up by one of the members!" But that was only his fun.

However, there is a tremendous need for rigorous honesty, particularly in small matters. We help the world by never doing one single act of which we are ashamed in our hearts.

Time is Flying

Gather ye rosebuds while ye may;
Old time is still a-flying;
And this same flower that smiles today,
Tomorrow may be dying. HERRICK

MUCH ADO ABOUT LITTLE

CATHEDRAL WALL NONSENSE AT OXFORD

How Suggestion May Lead Us All Astray

KEEP WATCH ON YOUR EYE

A very odd and amusing thing has been interesting people at Oxford.

The story has been spread abroad that a mysterious face has appeared on the walls of the cathedral there, and there have been sensational stories in some papers, in which it is said that this "face" had some ghostly origin. The fact is that the face on the wall has as much ghostly origin about it as the door of an old castle which is rattled by the rumblings of a distant earthquake.

What has probably happened in the cathedral at Oxford is that a patch of damp has appeared on the wall and has actually taken a shape which suggests the features of Dean Liddell, who died 25 years ago. As the memorial window to the Dean is just above the patch of damp everybody has been willing to believe that the portrait is actually the Dean's, and once the suggestion is made it is easy to imagine the stream of people coming along who look up and see Liddell's portrait there.

A Possible Explanation

Another suggestion is that undergraduates who use the cathedral as their chapel have been playing a hoax, and have been painting the portrait with some chemical that only gradually made its presence visible.

Nothing is more extraordinary than the power of suggestion to the eye. How often are we tempted to say "I saw it myself," or "I saw it with my own eyes." The human eye is a marvellously efficient instrument, but the eye will often believe a suggestion made to it.

We go to the cinema, for instance, and imagine we see pictures moving; but we do not. We stand and look at the electric signs in Piccadilly Circus, and think how wonderful the movement is; but there is no movement. The wheels are not going round; the ribbon in the woman's hat is not flying about.

If Your Sight Were Perfect

If the eye were quite perfect we should never have had the films. What we see at the picture-house is an alternation of picture and blackness, picture and blackness, picture and blackness. What we think we see is not what we really see; we imagine the movement because pictures follow each other quickly, and the eye cannot distinguish one thing from another if they rapidly succeed each other. For the same reason, if we whirl round a stick with a burning end, the eye sees (or the mind thinks the eye sees) not a travelling bright point, but a circle of light, though no such circle exists.

What the Eye Sees & Does Not See

The conjuror takes advantage in a hundred different ways of the fallibility of the mind's judgment about what the eye actually sees. He goes through the motions of throwing a coin from his right hand to his left, and we think we see that the coin has been transferred when nothing of the kind has occurred. He suggests the appearance of a glass of water held under a handkerchief, when, as a matter of fact, he has actually removed the glass of water and is merely hold-

NEWS FROM EVERYWHERE

The wireless craze in America is said to be dying out.

The National Debt, which was £15 10s. per head of the population in 1913, is now £167 per head.

Izaak Walton's Cottage

The appeal for funds to save Izaak Walton's cottage from destruction has been successful, and it is now being put in a state of good preservation.

The British Boy

The Prime Minister of New South Wales has just been saying that he has not found one failure among the British boys who have gone to Australian farms.

Young Swimmers

We said the other day that Gwyneth Codd, of Nottingham, aged nine, is the youngest holder of the Life-saving Swimmer's Certificate. Now we hear that Robert Mitchell, of Plaistow, won the certificate when he was not quite nine.

Ontario Parliament has passed an Act prohibiting betting news in newspapers.

The remains of a mammoth have been dug up in a garden at Gedling, in Nottinghamshire.

Where the Money Goes

The conferring of an earldom on a public man has lately cost the taxpayers over £1000.

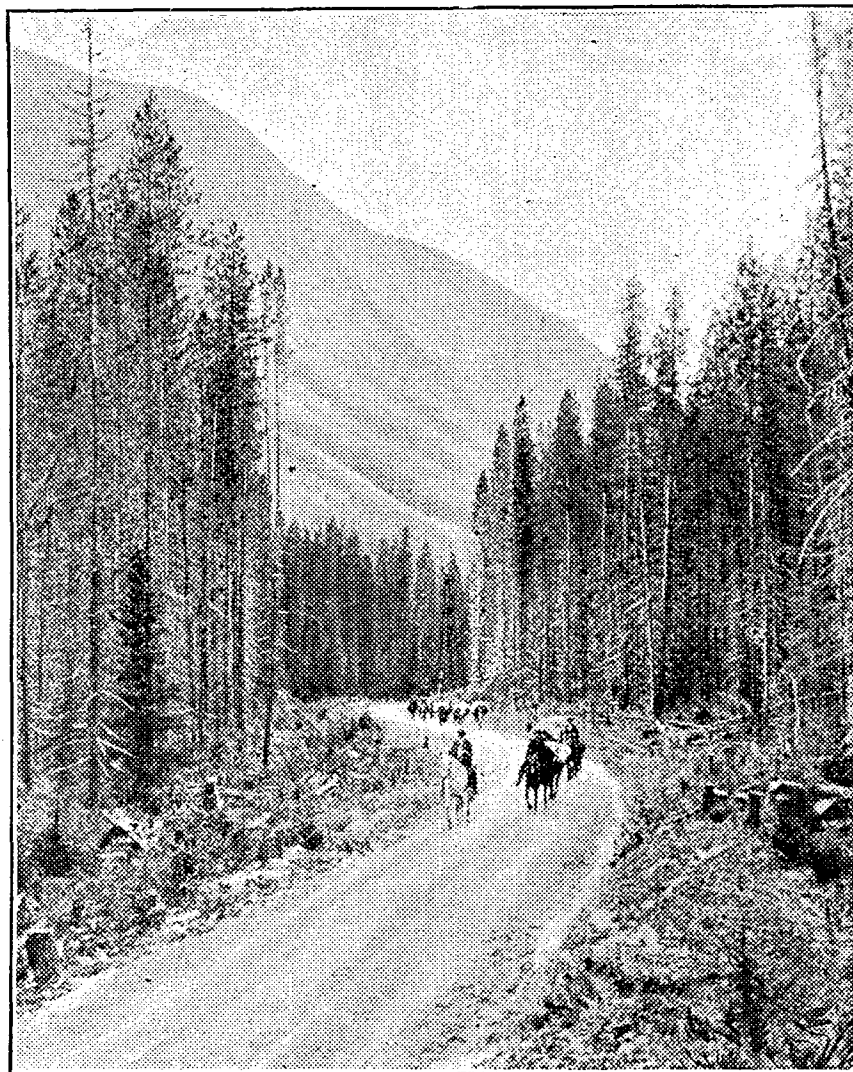
Millions of Millions of Marks

Since the end of last year the circulation of paper marks in Germany has risen from 1,280,094 millions to the enormous total of 25,491,738 millions. In June more marks were printed than in the previous four years.

The Nurses, God Bless Them!

At the annual meeting of the Royal National Pensions Fund for Nurses the other day, Sir Thomas Dewey announced that the exceptionally long lives of 341 of the nurses had upset the calculations of the statisticians of the fund.

CANADA'S WONDERFUL NEW ROAD



Part of the new road, eighty miles long, which has been built through the pine forest of British Columbia, and was recently opened for traffic. The road passes through massive mountain gorges, and hundreds of thousands of tons of rock had to be blasted away and used for filling up the valleys.

Continued from the previous column

ing a ring under the handkerchief. It is because the eye is so easily deceived, and because the mind is so often misled by the eye, that evidence in law courts is so often doubtful and contradictory. If six people see something happen they will usually give six different accounts of what they saw.

All this should show us the importance of constantly keeping a watch on our own eyes, to make sure that we really know what they see. Observation needs to be trained, and we should all make ourselves surer in observation.

It was recently recorded that an American professor made a most amusing experiment with his pupils to test their eyes, enabling them to realise the fallibility of the untrained observer.

He got two of his pupils to pretend to quarrel and to get more and more excited until, at a pre-arranged moment, one of them quickly took a banana from

his pocket and pointed it at his opponent as if it were a pistol. At that moment a real pistol was let off behind a screen. Naturally, this made a great scene, and when it had quietened down the professor got all the pupils to write out an account of what had occurred.

All the witnesses without exception declared that they had seen a pistol drawn and fired. Some of them said they saw the pistol go off, and some even declared that they saw the flash of the pistol and the smoke of the discharge. It was only too clear that if the students had had to give evidence of a real crime they would have been sadly untruthful, while meaning to do their best to tell the truth.

The value of a trained eye cannot be exaggerated. In biology, in medicine, in astronomy, and in many other sciences, a man will not go far unless he has schooled his senses and learned how far he can trust them.

THE DOCTOR AND THE CHINESE ARMY MISSIONARY'S GREAT MARCH

Firework Honours for a Brave Man

"BEHAVING" THE BIBLE

There are armies always on the move today in China. Wherever they come they seize the food of the people and their money and clothing; they are like devouring swarms of locusts.

Not long ago one of these armies under General Wang, a fierce soldier famous for his cruel temper, came to the city of Inghok, where an American doctor missionary was at work. The poor folk crowded into the mission buildings for refuge, with their chickens and pigs. Even the governor of the city came to the mission. Now, General Wang was much in need of carriers to bear the loads of his army to Sien Yu, fifty miles away. And he meant to have them.

"If there are not fifty carriers provided in two hours," he declared, "the governor, city elders, and leading business men shall all be put to death."

Doctor Shares His Food

But the Chinese did not trust General Wang; how did they know that he would let the carriers return? There was nothing for it but that the doctor-missionary should promise to go with them to protect them. That was why Dr. Edward Smith found himself for four busy days marching with his coolies behind the army of General Wang.

He was not compelled to go, but he did not waste those days. "From early light on those winter days," he writes, "until camp at night, twenty miles over fierce country roads, not a thing was given to these load-carriers to eat." The good doctor shared what he had: some dried fruits, and especially the quinine which he carried to cure malaria. But he saw terrible things: on the second night he saw a village looted by the soldiers, who killed ten pigs and every chicken, and stripped the gardens.

Waiting for a Bribe

When the soldiers had moved out of sight, and the doctor's party was left to follow, they had a fine welcome from an old lady in the village who was a Christian. As soon as she knew the army was out of reach she gave a signal, and the people began to return with bedding and coats and food.

Each night there were the sick to be tended, and a little tobacco to be shared. The shoulders of the coolies were sore with their loads; their hearts, too, needed cheering; and it was well that the doctor was with them. At last they reached Sien Yu; but it took Dr. Smith hours and hours to get his men set free. The officers in the army were waiting for a bribe; but not one copper coin did the rascals get. At last, about midnight, the party was released.

Home Once More

There were good friends in Sien Yu, missionary folk who gave the fifty a hearty breakfast, and then, with a white flag telling who they were, and with the American flag unfurled, they marched homeward.

They did the return journey in two and a half days, sleeping in chapels, where the Christians acted the Gospel of the Compassionate Saviour. The fifty men remembered afterwards who had welcomed them. There was a Chinese in another place who said, "I have been reading the Bible and behaving it."

The carriers were very grateful to their doctor guide. They offered him pea-nuts and cakes and candy. And there were fine times in Inghok city when all the fifty were safely home. The Chinese are fine hands at fireworks, and down the whole length of the city, and to the doors of the mission, the warm-hearted Chinese set crackers exploding in honour of their doctor friend!

THE DUKE'S CAMP

LIFE AS IT SHOULD BE

Rich Boys and Factory Boys
Good Friends Together

MERRIE ENGLAND AT NEW ROMNEY

During this week a camp for boys has been held at New Romney, in Kent, which is unique in its way, and is surely one of the best camps ever held.

It is a standing illustration of the fact that all men and all boys are brethren. The camp has been organised by the Duke of York, who is keenly interested in it, and the boys who are making holiday together have been drawn from all circles of society. Altogether there are four hundred boys at New Romney, and two hundred of them were drawn from the public schools, while the other two hundred have come from factories, works, and elementary schools.

One Level

The boys sleep in huts, and, with the exception of the afternoons, which are left free, the whole of the time is occupied in organised games, bathing, visits to places of interest, motor drives, and so on. Every evening a camp sing-song is organised by the boys themselves.

A novel feature of the camp is that no ordinary games are played. All the games are newly-invented, so that the public schoolboy, who spends so much of his time in games, may have no undue advantage over the factory boy or the boy from the elementary school.

For the purpose of these games the boys are arranged in groups, some of each group being from the public schools and some from the factories, and there is a great spirit of rivalry and emulation, not between the different social classes, but between the different groups that include all classes.

How the Shyness Went

A similar camp was held last year, and was a tremendous success. The Duke of York visited the camp and mixed freely with the boys.

When the boys first came together there was a good deal of shyness, but after the first bathe in the sea, when all went splashing in together, the shyness disappeared as if by magic, and never returned, the boys making merry together as if they had never heard of social distinctions or class consciousness.

Before they went to camp the boys all met in London and were entertained to lunch at Buckingham Palace.

The camp is a little picture of what the whole nation should and might be, all working together for the common good of humanity.

The Duke of York has shown himself the friend of all classes of the community, and his fine spirit has animated the boys, who, as they go back into private life, will carry into their families and schools and workshops happy memories of this week. *Portrait on page 12*

In the Auction Rooms

The following prices have lately been paid in the auction rooms for objects of interest.

Two missals, 1504 and 1497.	£610
Sword with silver-encrusted hilt	£546
Gray's Elegy, first edition	£390
A Charles II crown-piece	£360
Panel of Flemish tapestry, 1710	£250
Two drawings by Birket Foster	£170
Old Chinese dinner service	£48
Old English tankard	£25
A Queen Anne pattern farthing, dated 1713, realised	£2 12s. 6d.

THE MIND OF A CAT

WHAT DOES PUSSY KNOW?

Animals that Give Warning
When Danger Threatens

TIGER AS GENTLE AS A DEER

By Our Natural Historian

While we all believe that our own cat is the most intelligent of its kind, we rate cat intelligence generally rather low. Now come two stories which call attention to the matter.

The first is that of a cat at Ramsey St. Mary, in Huntingdonshire. A man and his wife were aroused in the middle of the night by the persistent, agitated outcry of their cat. On getting up they found their house on fire, and had just time to escape alive.

The second concerns a North London cat which, chased by an angry dog, leaped on to a moving tramcar and was whirled away to safety.

Which of those two acts implies the greater intelligence on the part of the cat? At first sight the animal which sought safety in a great mechanical contrivance capable of carrying it out of the danger zone seems to command special respect.

Probably, however, the selection of the running tram was pure chance, not deliberate selection. A wall would have served as well, or the branch of a nearby tree. The tram was there, a fact and a refuge; its motion had nothing to do with the cat's determination to board it.

Animals that Seek the Help of Man

The case of the life-saving cat seems to stand on another plane. It is not an isolated instance of the sort. Cats have often given their sleeping owners notice of fire. Are we to suppose that the cat in such cases reasons the matter out for itself, as a child would, and arrives at the conclusion that the sleepers must be roused so that they can save themselves and the cat?

The probability is that we see here the play of an instinct which makes animals in face of great terror turn to us for aid and protection.

It has been noted again and again that in time of forest fires and of floods larger animals than cats approach men with appealing manner, as if conscious that human beings understand these dreadful matters and may afford succour. In such moments a tiger will crouch submissive with a deer, a voracious bear with a shrinking bird.

The Rabbit and the Stoat

But more direct and unmistakable was the entreaty of a rabbit attacked by a stoat.

It was almost palsied with terror, as rabbits commonly are when stalked by these bloodthirsty foes; but, a man appearing on the scene, it crawled despairingly to him, lay down between his legs, and said as plainly as wordless speech could say, "I leave it to you."

The stoat was driven off; the rabbit recovered the use of its faculties and ran slowly away, unafraid, yet conscious that it must not press too far the advantage which its still greater enemy had kindly vouchsafed it.

Animals do turn to us, as a last hope, when in dire peril; and the acts of these life-saving cats which sound the fire alarm, so to speak, in the night, obey the same instinctive impulse which would actuate them in time of danger in the wilds.

A SHADOW FIFTY MILES LONG

One of the longest shadows on record recently fell on the American city of Tacoma. With unusual atmospheric conditions prevailing, a shadow fifty miles long was thrown by Mount Rainier, one of the highest peaks in America.

THE STREET PROBLEM

TRAFFIC GROWING IN ALL CITIES

How We are Losing Our Place
in the Sun

SHALL WE BE DRIVEN INTO THE AIR?

The street traffic problem, which is rapidly making London life intolerable, is troubling all great cities.

Increasing populations, growing business, and the coming of the motor vehicle have enormously increased the amount of traffic in streets. And we have come to a time when not only can no more vehicles find a place on the roadways of the city streets, but those already using them must be reduced in number if business is to be saved from deplorable delays.

Reducing the Number of Buses

Already there is started a movement to reduce the number of motor-buses on the London streets to make room for a limited number to get along at a reasonable speed. Slow-moving horse vehicles with heavy goods will also probably be warned off certain main thoroughfares during the busy hours, as they not only congest the streets, but reduce the pace of all vehicles to their own slow rate.

The problem is not new. It existed in Shakespeare's time, when a new kind of carriage, smaller than the big, old-fashioned, clumsy coaches, came into fashion, and was soon so popular that the streets of London were blocked with vehicles. At last so serious was the matter that a Bill was introduced into the House of Lords to restrain the excessive and superfluous use of coaches.

City Grows Upward

In New York today the situation is even more serious than in London. That city, being confined to a small area surrounded by waterways, can only grow upward, and it is clear that when a street is filled with twenty-storey buildings instead of five or six-storey buildings, the number of people working in the street and having to travel through it is enormously increased.

So far, in both London and New York, and now in Tokio, the only solution that has seemed possible has been to leave the heavy goods traffic in the sunshine of the streets and drive the millions of human passengers down into the dark tubes and tunnels underground.

Surely this is the wrong solution. If anything has to go underground it should be things, not people; but in this traffic question civilisation seems to be topsy-turvy.

Policemen Puzzled

What would the inhabitants of another world think of this planet if they could visit it and learn that men and women, and boys and girls, all of whom need sunshine and light for their health and happiness, were being driven underground to make room for the passage in the streets of heavy goods in slow-moving, horse-drawn vehicles?

The police authorities of London and New York are at their wits' end to know what to do to ease matters. In New York the Police Commissioner is proposing that the whole of some of the main thoroughfares should be given up to vehicles; and another idea is to build a new elevated roadway partly over the other to take several lines of vehicles travelling in both directions.

It is a gigantic problem, for which there seems no satisfactory solution, unless it be the development in the near future of air locomotion.

SEARCHING THE BRITISH ISLES

Chiefs Among Us Taking
Notes

LINKING UP BRITAIN AND NORWAY

There are parts of the British Isles where the Norsemen made history and left their traces lastingly in the language and in the physique and complexion of our people.

The Norwegians are becoming interested afresh in the links which bind Norway and Britain together, and are sending over a party of archaeologists to study the signs left in our midst of Norwegian invasions and settlements.

They will begin naturally with the Western Islands of Scotland, which are on the principal route of the earliest Norwegian invaders; and no doubt they will visit the Isle of Man, which has a population largely Norse in origin; and Cumberland, with its plentiful Norse place-names. They also speak of going to parts of Ireland; but they would find stronger traces of their speech in East Yorkshire, where, on the coast, the pronunciation of a number of words is undistinguishable from that of their Norwegian kin.

We are accustomed to the sending of expeditions of research and inquiry to ancient lands; but there is some amount of strangeness in receiving visitors who are probing into our own ancientness and ancestry. Still, we shall welcome them and their findings.

HOW FAST DO BIRDS FLY?

An Airman's Observations

How fast do birds fly? Some evidence on this interesting question has been collected by Col. R. Meinertzhagen, D.S.O., during aircraft observations.

Birds were timed by stop watches as they flew between two observation stations. Other birds were paced by aeroplanes and the speeds noted.

It was found that they had an everyday pace of about the same average speed, when they were doing their ordinary day's work; but flew about double the pace when they were pursuing their prey or seeking safety.

Here are some of the speeds noted:

Ravens flew from 32 to 39 miles an hour ordinarily; swallows, 37 miles; lapwings, 40 to 45 miles; starlings, 43 to 49; ducks, 42 to 50; pelicans, 51; geese, 55; and swifts over 68.

The comparatively slow speed of the swallows is surprising; but that may be because long, direct flights were not included in the tests.

EELS HOLD UP A TRAIN

Migrating to the Water Troughs

How a train was delayed for five minutes by live eels on the railway line near Rugby has been described in a technical gazette.

There are a number of water-troughs between the lines at Holbrook Park, from which the engine is able to replenish its water-supply while running; these troughs are fed from canals close by, and a number of eels had migrated from the canals to the troughs.

The water-scoop on the engine of a train had evidently brushed the eels to one side, for a large, dark object had been seen lying beside the metals, and the driver of the 2.29 train from Euston had been cautioned to proceed slowly at Holbrook Park. The eels which stopped the train—it was delayed for five minutes—were about 18 inches long.

HIPPO'S FATAL MEAL

It is difficult to kill a hippo with a bullet, but a tennis ball may do it. Zeekoe, lately the biggest hippopotamus in America, has died from swallowing a tennis ball tossed into his cage by a thoughtless visitor. In Zeekoe's stomach were also found a number of pennies.

THE WEEK IN GEOGRAPHY

JEDDAH

ARABIA'S PILGRIM PORT

Jeddah, the Arabian port on the Red Sea where thousands of Mohammedan pilgrims land every year for the journey to Mecca, has come into prominence lately owing to a curious incident.

At Mecca, the Prophet's birthplace, there is a sacred shrine called the Kaaba, which consists of a building fifty feet high, forty feet long, and thirty feet wide. This is situated in the middle of the great mosque and is the spot toward which all the pilgrims direct their steps, being particularly sacred to them, on account of an oval black stone, said to have been placed in position in the wall by Abraham, the Father of the Faithful. Every pilgrim to Mecca kisses the sacred Black Stone.

The Carpet that Went Home

Now, the little building which holds this sacred stone is kept covered with a cloth of black brocade, renewed every year; and the covering, or holy carpet as it is called, is woven in Cairo and presented by the Sultan of Egypt, who sends it with great ceremony to Mecca, whither many pilgrims accompany it.

This year, to safeguard the health of the Egyptian pilgrims, a number of Egyptian doctors accompanied the procession that bore the carpet; but when they arrived at Jeddah the doctors were forbidden to proceed farther, their presence being regarded as a reflection upon the Arabian doctors, who, declared King Hussein, were quite capable of looking after the health of the pilgrims.

The contention was very sharp; and, as no agreement could be arrived at and neither side would give way, the holy carpet returned to Cairo with the doctors, and the Kaaba will have to be content with its last year's covering.

Houses Built of Coral

Jeddah, where the carpet remained for some time while the dispute was going on, is about fifty miles from Mecca, and is one of the strangest places in the world. Stretching for about a mile along the shore of the Red Sea, its houses, of which many on the sea-front are quite imposing, are built of coral, and there are two large mosques besides a number of smaller ones. The coral for the houses is obtained from reefs which lie off the shore and protect the harbour.

Jeddah is by no means a good port from a European standpoint, for it has no wharves or other facilities for large ships to unload at, and the pilgrims have to land in little Arab boats. The city is said to have been founded by Persian merchants in the seventh century; but it did not become of real importance as a commercial centre till eight centuries later, when, with the growing trade between Egypt and India, Jeddah proved a convenient half-way house.

A Declining City

Its population increased, and the number of pilgrims for Mecca passing through it also increased. In 1891 the population was 47,000, but this has now been dropped to about half, and its former trade, averaging £5,000,000 a year, is now only about a quarter of that. This is due to the fact that, since the building of the Hejaz, Egypt, and Palestine railway many pilgrims prefer the easy and rapid train journey to the tedious, uncomfortable journey across the sea in a pilgrim boat.

The people of Jeddah are an astonishingly mixed crowd. Less than half are Arabs, and the remainder are made up of Greeks, Indians, Somalis, Nubians, Chinese, Malays, and even Dyaks from Borneo. There are many Christians, and in 1858 a massacre of Christians took place there.

Outside the walls of the city is a domed building which is also visited by all the pilgrims as the tomb of Eve, the Mother of Mankind.

C.N. QUESTION BOX

All questions must be asked on postcards; one question on each card, with name and address. The Editor regrets that it is not possible to answer all questions sent in.

Can Australian Parrots Talk?

Yes, many of them can talk, and the undulated grass parakeet is particularly noted for its talking powers.

What does Selah Mean in the Psalms?

The meaning is not known definitely. Some think it is a musical direction to the singers, possibly telling them to pause.

What Other Zoos are there in the British Isles Beside the One in London?

There is a zoo at Clifton, Bristol, another at Belle Vue, Manchester, and the Zoological Society of Ireland maintains a fine zoo in Phoenix Park, Dublin.

Where Does Ink Go When it Evaporates?

The fluid only evaporates, disappearing in the atmosphere like the water of a puddle, leaving the solid matter behind on the paper or in the ink bottle.

Who Made the First Motor-car?

The credit is usually given to Nicolas Cugnot, who made a moderately successful steam carriage between 1768 and 1770; but the first petrol motor-car was made by Gottlieb Daimler, in 1884.

What Should a Jackdaw be Fed On?

The jackdaw is practically carnivorous, and will cat scraps of all kinds. When domesticated it is often given its freedom, but is very mischievous, and usually ends up by being confined in a large wicker cage.

Why do Churches Have Bells?

Bells were first used in Christian churches about the sixth century to call the worshippers together. Then they came to be used for a variety of purposes—for curfew, for rejoicing, for fire alarms, and so on.

What is Serendipity?

This is a word invented by Horace Walpole and made up from Serendib, an old name of Ceylon, to describe the happy faculty of finding information or proofs of one's theories when not looking for them.

Why Do Stars Shoot?

They do not. What we call shooting stars are meteors, that is, fragments of some broken world floating in space that have been attracted by our Earth, and in rushing through the air become white hot and are burned up.

How is Iron Formed?

Iron is one of the eighty or so elementary substances of which all the universe is made up. If we knew how it was formed we should have solved the mystery of matter. The origin of the elements is one of the problems scientists are now studying.

What Causes the Formation of Stones?

Stones are fragments of rock that have been broken off by weather or water, often worn more or less smooth by being rubbed with other fragments in running water, and carried by river or stream to the district in which they are found.

Is a Photograph Really a Picture?

Strictly speaking a picture is a painting, the word being derived from the Latin *pingere*, to paint. In the course of time, however, the word has had its meaning broadened to include any representation of a scene, object, incident, creature, or person; so that a photograph can be called a picture.

Is the Singing Mouse the Same Species as the House Mouse?

Frank Buckland says the song of a singing mouse is a genuine song, as good as that of a lark on a fine summer morning. It is the common house mouse that is able occasionally to become a singer, but the cause is not definitely known. It is believed by some to be a disease due to a parasite in the liver.

Is there a Greater Number than a Million?

Numbers can, of course, be made greater and greater to infinity, but we should be limited in our names unless we kept inventing fresh ones. A trillion is a million million, and the name is from the Latin *tri*, three, or triple, and million. In the same way other combinations are made up from four, five, six, and so on, such as quadrillion, quintillion, sextillion, and so on.

What was the Burning Bush?

The mysterious burning bush of the Bible is supposed to have been a shrub quite common in the south of Europe. It has rose-coloured blossoms and a peculiar fragrance. The plant gives off a resinous juice, which is highly inflammable in hot weather, and if on a warm evening a light is applied to the bush it will often burst into flames for a few seconds. The volatile resinous substance will soon burn away, and the bush then remains apparently little the worse for the fire. The plant is known as the dittany.

What Should a Lizard be Fed on?

They live on flies, spiders, worms, and caterpillars, but in captivity do well on a diet of raw beef cut into very small pieces.

Is a Bath Five Feet Round Big Enough for Four Newts and Two Fishes?

If it is fairly deep, it is quite big enough, but not if it is shallow like a foot-bath.

What are the Gigantic Worm Casts, Seen in Queensland, that Trip Riders?

They are probably the casts of the megascolides worms, which often grow to a length of five feet.

Why is Cwt. Used as an Abbreviation for Hundredweight?

The C is the old Roman numeral for a hundred, being the initial of centum, the word for a hundred, and wt is the first and last letters of weight.

Do Goldfish Sleep?

All creatures have their periods of rest, and a fish sleeps; but the difference between a fish asleep and a fish awake is much less than the difference between a boy or a dog asleep and awake.

What is the Imperial Standard Yard Made of?

It is a solid square bar made of bronze, on which is marked the length at the temperature of 62 degrees Fahrenheit. The bronze is composed of 16 ounces of copper, 2½ of tin, and an ounce of zinc, avoirdupois.

Are Mainz and Mayence the Same Place?

Yes; Mainz is the German name for this city on the Rhine, while Mayence is its French name. In the same way Cologne is French, while Köln is the German name; and Aix-la-Chapelle is French, and Aachen German for the same city.

What Were the Seven Wonders of the World?

The Hanging Gardens of Babylon; the Pyramids of Egypt; the Temple of Diana at Ephesus; the Statue of Jupiter by Pheidias at Athens; the Colossus of Rhodes; the Mausoleum at Halicarnassus; and the Pharos, a lighthouse, of Alexandria.

What Makes Us Yawn?

When we are tired or bored we are not breathing as deeply as we should, and the blood is not getting enough oxygen. Part of the brain is very sensitive to changes in the blood, and when it discovers this, it sends an order for a deep breath to set matters right.

Why Do Daisies and Other Flowers Close Their Petals When it is Going to Rain?

Because they cannot bear much moisture, and so they close their petals to protect their sensitive parts. In the course of evolution these daisies that developed the habit of closing their petals survived; the others died out.

What is the Pan-American Union?

An international organisation with an office in Washington maintained by the 21 American republics: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Salvador, United States, Uruguay, and Venezuela.

What is the Origin of the Name Massachusetts?

Massachusetts is an English form of a compound word in the language of the Indian aborigines, Massa meaning Great, Wadchoash, Hills, and Et, At or Near. The name means, therefore, At the Great Hills, and was originally given to a limited area near the Blue Hills.

Why Do Worms Come Above the Ground in Very Wet Weather?

Worms, although now creatures of the land, were originally purely aquatic animals, and their prevalence in wet weather and wet places is, no doubt, a survival of past habits. In their construction there are still many relics of their previous adaptation to life in the water, and Darwin tells of worms that lived for nearly four months completely submerged.

What are Elementary, Secondary, and Continuation Schools?

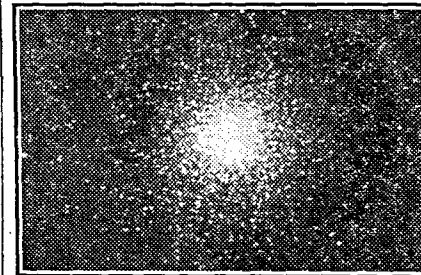
Elementary schools are schools in which only simple teaching is given, the education consisting mainly of a good groundwork in a few subjects; secondary schools are schools in which the boys and girls remain to a much greater age and receive a far more advanced type of education on a greater variety of subjects; continuation schools are schools which hold classes at convenient times, for continuing the education of those who have left the ordinary schools and gone to work.

BIG STAR CLUSTER
MYRIADS OF SPARKLING
SUNSSuperb Grandeur of a Distant
Patch of LightGREAT PROBLEM FOR
THE ASTRONOMERS

By Our Astronomical Correspondent

One of the most marvellous objects of the heavens may be found in the constellation of Hercules, now almost overhead. This is the famous star cluster known as Messier 13. Its exact position was shown in the star map in the C.N. for July 28, which will enable it to be found, about one-third of the way down from Eta in Hercules toward Zeta.

In the early part of next week, when the Moon will be absent, observers will have an opportunity of locating this



The Star Cluster in Hercules

From a photograph taken at Lick Observatory

celestial wonder—and still more favourable ones on the darker nights later on.

On a very dark and clear night Messier 13 is just perceptible to the naked eye, when it appears like a very small and faint patch of light, rather like a misty star; with glasses it is easily seen.

This patch of light represents a veritable universe of suns, which a powerful telescope reveals as a scene of superb grandeur, thousands of sparkling suns being congregated together in what appears to be a globular cluster. But on close inspection the suns are seen to form streams that radiate in spiral curves from the dense mass in the centre.

A Great Blaze of Light

There they are much more numerous; and thousands of them appear to combine into one great blaze of light, which is what we see with the naked eye. Actually vast distances separate each individual sun in this enormous assemblage—hundreds of light years in many cases. They only appear to be close together owing to the terrific span of space that separates this great concourse of suns from us.

Dr. Harlow Shapley, of Mount Wilson Observatory, has estimated the distance to be 36,000 light years—the time that faint patch of light, which the naked eye can just see, has taken to reach us, travelling eleven million miles a minute.

For these suns to be visible to us at all at such a distance proves that they are all much larger than our own Sun, and it has been calculated that it would take over a million suns of the size and weight of ours to provide the material for the suns visible in that cluster.

Millions of Unseen Suns

But what of those that are, like our Sun, too small to be visible? That there are millions more there cannot be any doubt, and unquestionably still more millions of worlds.

The visible suns of Messier 13 are of every type and in every stage of evolution, like those of the great universe of which our Sun forms a tiny unit.

When the writer looks at Messier 13 through his telescope more stars are visible in that cluster than are perceptible all over the sky with the naked eye. Now, taking into account the myriads in Messier 13 that are unquestionably beyond telescopic powers, the question arises: Have we there another universe more or less similar to our own?

This is one of the great problems now facing astronomers. G. F. M.

THE HEIR OF A HUNDRED KINGS

The Strange Adventures
of a Schoolboy in Africa

CHAPTER 46
A Midnight Visitor

FOR some time Roger and Suleiman searched the neighbourhood for the head of the path down which Keb had gone. But in whatever direction they turned they met with nothing but deep crevices, blank walls of rock, impassable gulfs.

Fearful of being overtaken by darkness, they decided to abandon the attempt for the present, and to come again next day, if the priests could still be avoided. The temple would shelter them for the night.

Retracing their steps, not without difficulty, they halted at the spot where the stream entered the gorge.

The current was not very rapid, though probably in the rainy season the stream became a torrent. Roger could not doubt that it was made use of in some way by Keb in his mysterious comings and goings.

It was dark by the time they regained the alcove. A cold wind was sweeping across the lake, penetrating openings in the temple walls. The prospect of a night in this chill, deserted, eerie place, among fantastic images, on hard stone chairs, was not pleasant, but at least they seemed to have nothing more to fear from Keb.

Yet Roger determined to be on his guard. With Suleiman's help he carried a stone bench into the alcove and laid it across the secret opening. No one could now enter without disturbing them.

The two made themselves as comfortable as possible. Curled up on wide-seated chairs, they prepared to sleep. But the fatigues and excitements of the day had wrought on Roger's nerves. He was wakeful, restless; dozed off for a few moments, then awoke with a start.

He hugged one comforting thought. His friends were still in the valley. No doubt they were still searching for him. They were but a few miles away, and if only the fates were kind it would surely not be long before he could rejoin them.

In the middle of one of his periods of dozing, he was aroused by a slight sound from the alcove.

He nudged Suleiman, sleeping soundly at his side. The man instantly started up.

Roger switched on his torch. The light, flashing into the alcove, revealed a shining figure in the secret doorway.

Roger and Suleiman sprang to their feet at the same moment. The figure disappeared. The revolving slab slammed to.

"El Nimmur! El Nimmur!" cried Roger excitedly.

They rushed into the alcove. Delayed by the necessity of removing the bench, it was some time before they passed through the opening, down the steps, and into the underground passage. Ahead they heard hurrying footsteps, but the torch's ray failed to light up the intruder.

"El Nimmur!" cried Roger again.

The narrow passage rang with jumbled echoes.

As they drew near to the farther end of the passage they heard a click. The man they chased had passed out through the door and closed it behind him.

Roger pressed the knob; the slab revolved; and they emerged into the darkness and the cold. Roger flashed the torch around; he saw nothing but the bare rocks and a small pool of water just below the doorway.

"El Nimmur! El Nimmur!" he called.

There was no answer.

"That was a friend," said Roger.

"I am almost sure of it. You saw

Told by
Herbert Strang

how his body gleamed in the torch light. He was dripping wet. You see this pool of water. He must have come through the stream. He is a mighty hunter, who befriended us in the valley. How comes he here in Kush?"

"Has he a withered arm?" asked Suleiman.

"Yes," replied Roger in astonishment. "You know the man?" Suleiman bent his head.

"I know him, my master."

CHAPTER 47

Baffled

THEY stood awhile at the entrance, peering into the night, listening. Below them, in the far distance, a faint light twinkled. "Our camp-fire," thought Roger.

"Let us get back," he said. "The man is gone. You shall tell me what you know of El Nimmur."

In the quiet of the temple Suleiman related that a man of Kush, who had a withered arm, had left the country many years before. Twice since then he had been captured within the borders; how many times he had been in and out secretly could not be known.

On each occasion of his capture he had been condemned to death, but had mysteriously made his escape. Some people credited him with supernatural powers; others supposed that he had good friends among the priests.

"Why did he leave the country?" asked Roger.

"He went away after the murder of the rightful king," replied Suleiman.

"And why has he come back at the risk of his life?"

"Who can say?"

"I wish I had not flashed my torch and scared him away," said Roger. "He could not see me, of course. If he had seen me he would not have gone. We could have talked, and he would have carried news of me to my friends."

He felt bitterly disappointed. And then, as he sat thinking over the matter, he began to put together in his mind circumstances that hitherto had seemed unrelated to one another.

Fleeting suspicions had occurred to him, only to be dismissed or crowded out by the strange incidents in which he had been concerned.

He recalled the attempts of Keb upon the life of Achmet; the pursuit of Achmet by the Basé; the meeting of Achmet and Muleh; the hunter's interventions. Already he had suspected that Achmet, brought up by his guardian in Cairo, was identical with the infant son of Sanka-ra, who had disappeared after the murder of the king. But hitherto there had been a missing link in the chain. There had been nothing to connect Achmet directly with the land of Kush.

Now he knew that Muleh was himself a native of the country and made secret visits to it. Was it not likely that he came in the interests of Achmet? Did he not seek the restoration of the rightful king?

But Roger was still greatly puzzled. Muleh had friends in the country; if he was working for Achmet he must be working with them. Why, then, had they made so stupid a mistake as to accept an English boy as their king? Was Hoteb absolutely mad?

Roger considered whether to tell Suleiman what he was thinking. He decided against it.

"Better not," he thought. "At present, at any rate, I am king, and, although he knows I am not really, it is just as well that I should keep some authority over him. Our fortunes are linked together."

During the rest of the night he slept fitfully. In the early morning

he went again with Suleiman through the passage, hoping to find traces of the hunter.

The small pool still lay below the outer entrance, and a slight trail of water led to the bank of the stream, near the post. There it ended.

Further exploration was rendered impossible by the appearance of the barge moving across the lake toward the island.

"Stoop!" said Roger. "We must creep back. The priests must not see us."

Taking advantage of every means of cover, they made their way quickly back to the entrance. That was in full view from the lake, and they dared not enter it while the barge was in sight.

They crouched down, peeping cautiously over a projecting knob of rock.

At last the barge was hidden by the temple. They clambered through the doorway, closed the slab behind them, hurried through the passage, and had only just settled themselves in the temple when the two priests came in, bearing baskets of food.

CHAPTER 48

Sanka-ra Forgets Himself

ROGER was quite ready for his breakfast. The baskets contained slices of roast goose, strangely-shaped loaves and cakes, and abundance of fruit. He took from his pouch the knife that Keb had dropped.

The priests started, looked at each other, spoke together. One of them turned to Suleiman, and addressed him in tones of agitation. Suleiman looked worried.

"What does he say?" asked Roger.

The answer surprised him. It appeared that the knife was the ancient sacrificial knife of the priests, and these men wondered how the king had become possessed of it.

Roger was in a quandary. It would never do to tell the priests anything about the strange incidents of the night. Yet it was necessary to allay the excitement into which the sight of the knife had thrown them.

"Invent something," he said to Suleiman. "I don't care what you tell them, provided you say nothing of Keb or El Nimmur."

Suleiman rose to the occasion. With an air of solemn mystery he told the priests that the king had been rapt in meditation before the statue of Amen-ra, and suddenly the sacred knife had appeared at his feet on the temple floor. It was a sign of favour!

The priests instantly prostrated themselves to the ground. Evidently they were very much

impressed. When they rose, at Roger's bidding, their manner toward him betokened a new respect.

Roger, having made a hearty meal, handed the remnants of food to Suleiman and the priests, and walked round the island, considering what his next move was to be.

He had discovered the secret way by which Keb and Muleh came and went, but his knowledge was still incomplete. How did they descend to the plain? He had seen Keb moving at the base of what appeared to be an unscalable precipice. How did he get there?

It seemed that to find the answer to that question would demand a prolonged search. Such a search was impossible so long as the priests were at hand, but Roger could not, for the life of him, think of any pretext for getting rid of them.

Loth as he was to give up his quest when success appeared to be so near, he felt that the safer course would be to carry out the programme arranged for him, return to the city, and seize the first opportunity that presented itself of returning to the island.

Accordingly, when the priests had paid their devotions to the statue of Amen-ra, Roger signified that he was ready to embark.

His feelings, as he was rowed back across the lake, were very different from those he had suffered the day before. Then his heart had been heavy as lead; now it beat high with hope and lightness.

He rejoined his escort, the march was resumed, and half a day's journey along the crest of the hills brought him within sight of the city.

At the appearance of his procession, crowds flocked to meet him. It was clear that a great part of the populace were enthusiastic supporters of their new king. And as the priests spread the story of the mysterious gift of the sacred knife, the people's joy broke out in singing and dancing.

"I felt a horrible fraud," said Roger afterwards. "At the same time, when I thought that very likely through me they would after all get their rightful king, I was not so sick of it all as I had been before."

The procession, moving slowly among the thronging crowds, had almost reached the palace when Roger noticed, in the distance, another procession approaching from the opposite direction.

A small group was advancing along the path by which he had first come to the city.

He looked, and looked again. His eyes widened; a flush rose in his cheeks; a tingling thrill ran through his whole body.

Amid an escort of white-robed priests and helmeted warriors walked three figures whose costumes marked them out as strangers in the land of Kush. Two of them wore sun helmets; the third was a small man whose long white beard waggled in the breeze.

And then the people of Kush were shocked into an amazed silence. Their king, their revered Sanka-ra, sprang out of the litter of state so suddenly that the bearers staggered one against another.

Gathering up the long robe that impeded the movement of his legs, Roger ran up the road as though sprinting in a race.

The musicians stopped playing; priests, warriors, and people stood fixed, watching their king's diminishing form.

He sped along, heedless of the silent spectators on either side. He reached the advancing group; he pushed to right and left the priests at the head; and then the people of Kush saw their king's arm moving up and down like a pump handle in the grasp of the two strangers, and the little bearded man dancing around them all.

What strange frenzy of madness had smitten Sanka-ra?

TO BE CONTINUED

Who Was He?

The Poet of Athens

MORE than four centuries before Jesus was born there lived in Athens a poet who was the greatest of all the Greek writers of comedy, and, some think, the greatest of all time.

Scarcely anything of his private life is known to us, and of the 54 plays he is said to have written only eleven have been preserved. Yet these are among the greatest masterpieces of the world, and are read today both in Greek and in translations.

It is from these plays that we know nearly all that can be pieced together of the great poet's life. Beyond his father's name and the fact that his parent had possessions in a rocky island away from Athens, and that the poet had three sons who were also comic poets, nothing has been recorded by other writers; but from his own plays we know many things.

We know, for instance, that the author was a great patriot and had a tremendous love for Athens, which he wished to see attain once more the high glory that she had enjoyed in the previous generation. While politics was not always his chief object in writing his plays, he invariably expressed in these his views on men and things, and he made many enemies.

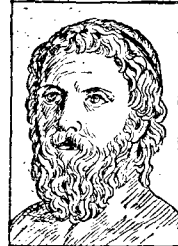
One of these was a great demagogue who had been a tanner but had worked his way into the people's favour and had obtained much popularity. The poet regarded him as a public danger, and in his plays lampooned him unmercifully. But the demagogue had great power, and when one of the plays in which he appeared was written and ready for the stage, no actor could be found bold enough to impersonate him. The poet, however, was not to be beaten, so he took the part himself.

Naturally, the demagogue was his bitter foe and often tried to deprive him of his civic rights, even endeavouring to show that he was not a true Athenian but a foreigner.

The poet portrayed and castigated the evils of his day, and it is largely from his plays that we know as much as we do of the Athens of his time. He was an enemy of war and a great advocate of peace. He also greatly condemned a new system of education that did not put truth above everything.

Unfortunately, while he could see the evils of his time, he had no other remedy for them but a returning to old ways, and this, of course, was not sufficient for a very progressive age.

An interesting feature of his plays is that animals of all kinds are introduced to add to the burlesque element. He died about 388 B.C. Here is his portrait. Who was he?



Do not miss this delightful story of "The Scout of Lonely Island." It is a story every boy and girl should read. Starting in the grand Seaside Holiday Number of—

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August 11, 1923

The Children's Newspaper

II



The Red Poppy Lady is Dancing on the Hill



DI MERRYMAN

"COME into my garden," said Robinson to his neighbour, Smith. "I have just bought a new dog and I'd like you to see it."

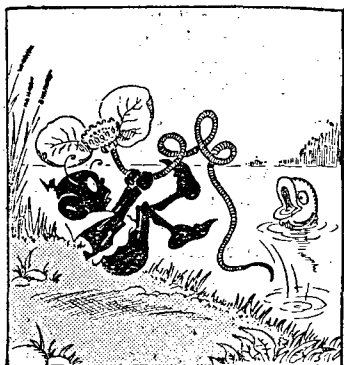
For some time the two friends stood watching the puppy, which was vainly trying to catch its own tail.

"What sort of a dog do you call that?" asked Smith.

"A watchdog."

"Ah, then, I suppose it is just winding itself up!"

What Will Australia Do Now?



THE Brownie pulled, the Brownie tugged,
Until there came a crack,
And with his water-lily prize
He landed on his back.

"It doesn't do," the Brownie thought,

"To pull up plants like these.
I fear I've snapped a cable laid
To the Antipodes!"

Do You Live in the Isle of Wight?

THE origin of the name Wight is not quite certain, but it is believed to be a changed spelling of the old Roman name for the island, Vectis. Some think it is from the old Celtic Gwyth, meaning channel.

The Anglo-Saxon Chronicle states that it is called after Wihthgar, the great-grandson of a King Cerdic who conquered it.

WHY is a railway time-table very much like human life?

It has many ups and downs.

A Built-up Word

ONCE I bestrode a lazy steed,
And used the first to mend his speed;

For a long way I had to go;
To get some cash a man did owe.
My second, safe within my coat,
I had to show—'twas all I got;
When I arrived the man was gone,
My money also with him flown.
My third's a letter—bear in mind
It is the first and last you'll find.
A term, my whole, you often hear
Applied to coins and such-like gear.

Solution next week

Easier Than it Looks

ASK your friends "If they can guess the meaning of this curious puzzle:

My first is everything.

So is my second.

My third is also.

The answer is simply the word "also."

If a pair of eyeglasses could talk, what ancient historian would they name?

Eusebius (you see by us).

The Sensible Moon

A PARTY of friends were speaking of the fine weather when one of them, a poet, became very enthusiastic about the Sun.

"How glorious and useful it is!" he exclaimed.

"Well," said one of the friends, "I admit that it is a useful body, but, in my opinion, the Moon is far more useful, for it shines in the night when we need light, but we only have the Sun in the daytime, when, of course, there is already plenty of light."

WHAT is that which, the more you take from it the larger it grows? A hole.

What Am I?

I'm often kept by king and queen,
Duke, baron, peasant, dean;
Lords and ladies prize me, too;
I'm liked by them as well as you.
I'm high, I'm low, I'm short, I'm long,

I'm thin, I'm thick, I'm weak, I'm strong;
I'm plain, I'm fancy, handsome, too;
For comfort's sake I'm used by you.
I'm found in every place you roam,
Mountain, valley, and at home.
I please sometimes, at others tease;
I cause you pain, I give you ease;
Abuse me not and I'm your friend,
I'll take you to your journey's end.

Answer next week

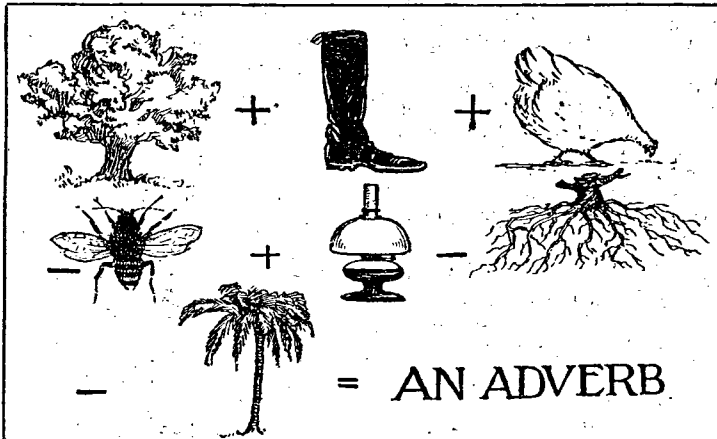
WHY is Buckingham Palace the cheapest building in England? Because it was bought for one sovereign and kept up for another.

ANSWERS TO LAST WEEK'S PUZZLES

A Puzzle in Rhyme	Wild Iron Nile
The Puzzle of 45	8+2 = 10 12-2 = 10 5x2 = 10 20÷2 = 10 45

Can You Find This? South Pole

Alphabet and Arithmetic



When the letters of the words represented by these pictures have been added and subtracted the resulting word will be an adverb. Can you find it? Solution next week

Bingo on the Scent

BINGO was quite a famous dog. Although one of the ugliest that ever chewed a bone, he had driven off a burglar, and all the neighbours knew it. Jacko was very proud of him.

One night Mr. Jenkins, a friend of Mr. Jacko, who lived outside the town, had his house broken into.

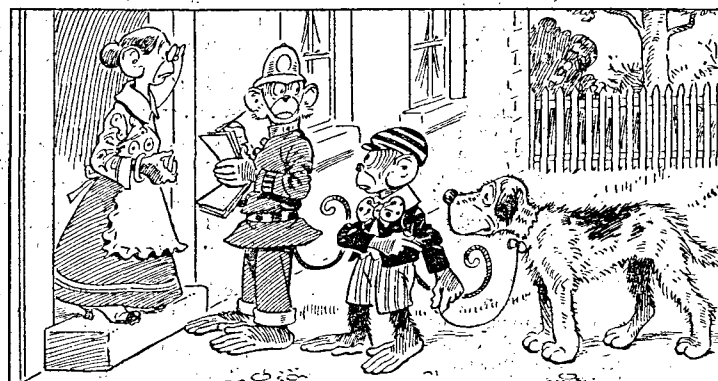
Next day, Jacko arrived on the scene. Police-Sergeant Murphy was making notes, and Mrs. Jenkins was describing the stolen spoons.

"Shall I put Bingo on the scent?" asked Jacko. "He's a wonderfully good police-dog, and I believe he could track the man down."

The policeman sniffed at the idea, but Mr. Jenkins was delighted with it. He and Jacko told Bingo to "Seek him out." For some time Bingo sniffed round the garden, wagging his tail, and then off he went into the open country with Jacko and Mr. Jenkins in pursuit.

The thief evidently avoided the road, for Bingo led them through hedges, across fields, into a wood.

"I hope he doesn't leap out at us suddenly," panted Mr.



"Shall I put him on the scent?" asked Jacko

Jenkins, as he struggled with the brambles. "I don't like this." "Here's the end of it," called Jacko; "but there's rather a broad stream to clear."

"I can't do it," said Mr. Jenkins. "I must go round to a narrower part of the stream."

"There's no time," said Jacko. "Come on, we must try."

Mr. Jenkins tried—just missed the opposite bank, and was knee deep in weedy water when Jacko landed on top of him. There might have been some very nasty things said if they had not both been so anxious to catch up Bingo.

When they staggered out, Bingo was circling round the field. Suddenly he yelped; up started a hare, and off went Bingo in full cry.

"That's the scent he's been on!" groaned Mr. Jenkins.

"We must try him again," grinned Jacko.

They called Bingo off, and set out for home, tired, wet, and wondering what would be said of their torn jackets.

Once more Bingo was led to the scene of the burglary. He needed a lot of urging, and seemed puzzled, but at last he trotted off in the direction of the town. Jacko ran alongside, encouraging Bingo, setting him on, till the dog's back bristled.

Suddenly a bend in the road revealed Police-Sergeant Murphy on his way home. With a yelp of triumph Bingo hurled himself on the trousers leg of the law.

There was a stout sapling in the hedge—both Jacko and Bingo know that only too well.

The paragraph on the right is a French translation of the paragraph on the left

Battle for the Trees

Sixty million pounds' worth of white pine timber is at stake in the battle now being waged in British Columbia and the Pacific Coast States against what is known as blister rust.

First noticed on the timber a little over a year ago, this fungus growth has been spreading rapidly, and now all the Governments concerned are uniting to stamp it out.

With the assistance of aeroplanes, large forces of men have been scouring the woods for traces of the pest, and burning affected trees.

This blister rust has been known for sometime in Europe, but has only recently invaded North America.

La Lutte pour les Arbres

Du bois de construction en pin blanc, de la valeur de soixante millions de livres sterling, est l'enjeu de la lutte qui se livre actuellement en Colombie Britannique et dans les États du Littoral Pacifique contre ce que l'on appelle la rouille à cloques.

Remarquée sur le bois pour la première fois il y a un peu plus d'une année, cette fongosité s'étend rapidement, et actuellement tous les gouvernements intéressés s'unissent pour la détruire.

Avec l'aide d'aéronefs, des équipes considérables d'hommes ont battu les forêts pour y chercher les traces du fléau et ont mis le feu aux arbres atteints.

Cette rouille à cloques est connue en Europe depuis un certain temps, mais ce n'est que récemment qu'elle a envahi l'Amérique du Nord.

Tales Before Bedtime

The Roundabout

THE twins were allowed to go to the fair by themselves, and spend a shilling between them.

The common was covered with tents and stalls and coconut shies, and in the middle of them all there was a big roundabout with lovely wooden horses with yellow and blue and green spots and scarlet saddles.

"Here you are, sir! Three shies a penny! Take a nut home for supper," shouted the coconut man. Jack had three shies and Josy had three shies, but neither of them was lucky enough to take a nut home for supper!

Then they bought a bright blue vase with a gold top and red roses on it for Mummy, and there was only fourpence left.

"I'd like an ice-cream," said Jackie.

"No," said Josy. "We must go on the roundabout."

"Come along, little missy! Here's a fine horse waiting for you. Pink spots for the lady and blue for the gentleman. One penny, and here you go round and round!"

They climbed on to the wooden horses, and it was perfectly lovely, and music played loudly all the time.

When it was over Jackie said: "Let's go again, Josy. We've got twopence left."

They were just going to climb up when Josy saw a little ragged boy and girl looking at the roundabout with longing eyes.

"Oh, Jackie!" she said. "Look! I don't believe they've ever had a ride."

"Well, do you want to treat them?" Jackie looked rather doleful.

"Yes. Do let us!"

To the surprise of the ragged little couple they were invited to mount the prancing steeds.



It was perfectly lovely

They seemed to enjoy it even more than the twins, and when the ride was over Jackie said: "Well, the shilling's gone now and I suppose we'd better go home."

But they hadn't gone far when they met Uncle Dick. "Hullo!" he cried. "Come with me and see how many times you can go round without being giddy!"

And the best of it was he invited the little ragged children as well.

The Children's Newspaper grew out of My Magazine, the monthly the whole world loves. My Magazine grew out of the Children's Encyclopedia, the greatest book for children in the world.

CHILDREN'S NEWSPAPER

August 11, 1923

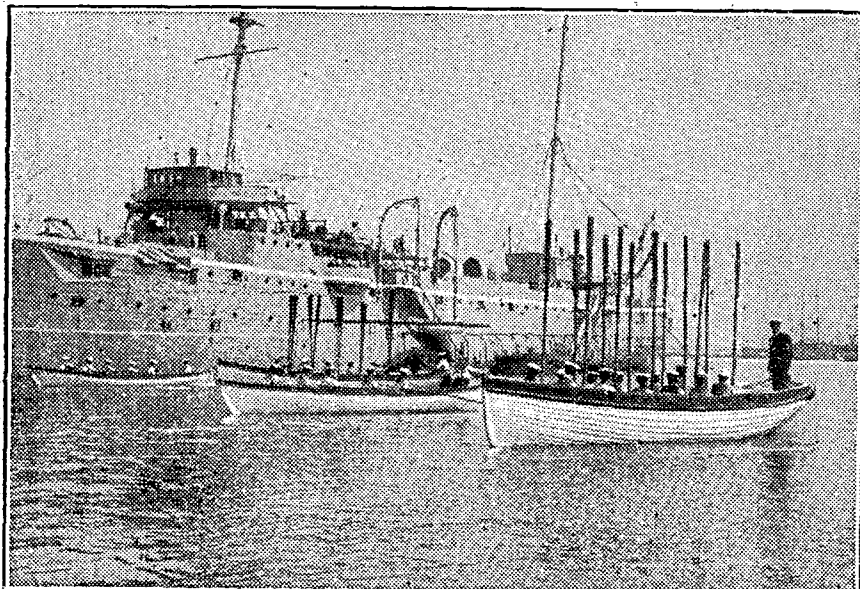
Every Thursday, 2d.

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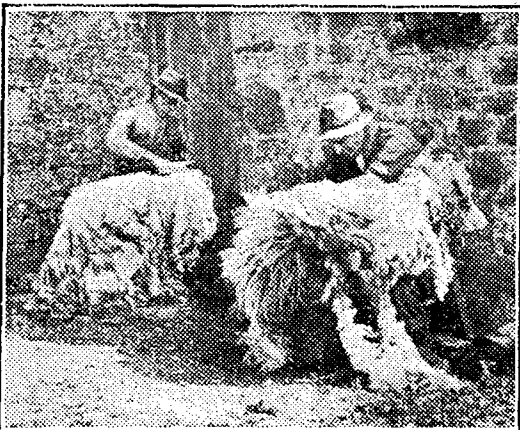
A NEW-BORN ISLAND • CANADA'S BUMPER HARVEST • A SKIPPING RACE



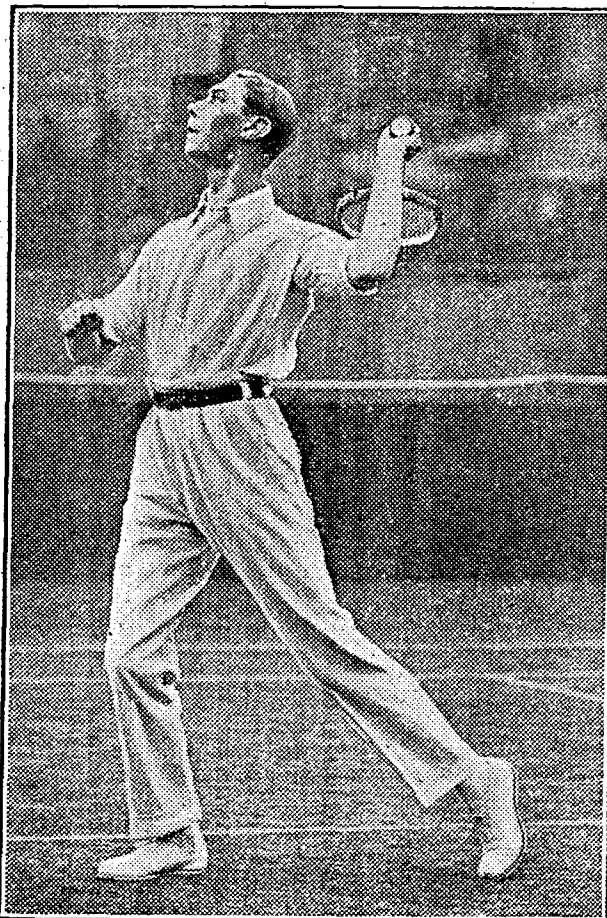
Gathering the Tomato Harvest—A thirty-thousand-ton harvest of tomatoes is now being gathered in the Lea Valley, Essex, where the glasshouses, if placed end to end, would stretch more than four hundred miles. Here we see the pickers at work in one of the glasshouses.



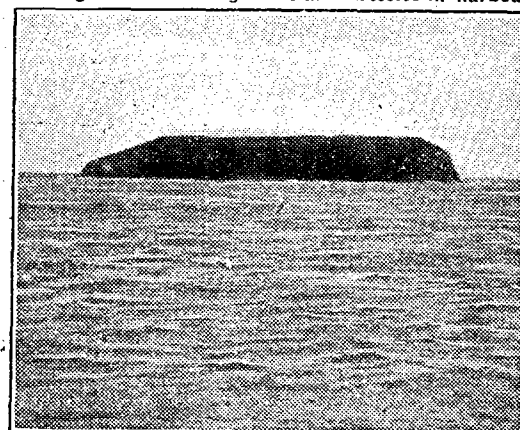
Boys Learn to be Sailors—The old Warspite training ship at Greenwich, on the Thames, has been replaced by the modern ship shown in the picture, and this was inaugurated by the Prince of Wales. Here the boys are learning how to exchange official courtesies in harbour.



Sheep-shearing in Cumberland—This is sheep-shearing time in England, and here we see the wool being clipped from sheep in the Cumberland Dales.



The Duke of York at Play—The Duke of York is holding a holiday camp at New Romney, in Kent, which is being attended by 200 boys from the great public schools and 200 from factories and elementary schools. Here we see the Duke at tennis, playing in the Royal Air Force Doubles. See page 8.



A New-Born Island—This is the island of volcanic origin which has just risen out of the China Sea. Exploration is difficult owing to the sulphur fumes.



An Up-to-date Railway—This 15-inch gauge railway runs up the Eskdale Valley, in West Cumberland, and is keeping up to date by relaying its permanent way, renewing its rolling stock, and arranging excursion facilities. It is a very busy little railway.



Danish Girl Guides in London—A party of Danish Girl Guides has been visiting England, and among the sights which interested them most was the Tower of London. In this picture they are asking a Beefeater the way to the Crown jewels, which they wish to see.



Gathering Canada's Harvest—This year Canada will have a record wheat harvest, the estimated crop being 500 million bushels, or a hundred million bushels more than last year's record. This picture shows how the wheat is taken from the field by large teams of horses.



A Skipping Race—All kinds of races are run nowadays, and at a recent children's sports festival at the Crystal Palace, Sydenham, a skipping race created very great interest. The start is shown here, and the ten-year-old girl on the extreme right proved the winner.

ALL THE WORLD LOVES THE C.N. MONTHLY. ASK FOR MY MAGAZINE. EDITED BY ARTHUR MEE

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